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This conference on gifted children was called by the U.S. Office of Education to broaden the concept of the gifted to include all areas of giftedness and to bring about some understanding on the part of society of the necessity for nurturing excellence. To reach the high goal of providing quality education there must be a massive determined educational effort. The task of differentiated education for the gifted is difficult but extremely significant for our society. On the state level, the directors of education must provide a program of orientation, identification of the gifted, flexible organization, understanding of mental abilities, and evaluation. On the national level, the U.S. Office of Education must act as a catalyst to provide a broad program of information, research, action, and trained personnel for gifted students from kindergarten through graduate school. Common problems arise in the state-wide direction of programs for gifted children. These problems include terminology, professional preparation, provisions in small schools, pupil placement, school marks, and program evaluation. In the present state systems for educating the gifted, the role of state director of these programs has been a fluid one. His responsibilities are in the areas of consultation, administration, curriculum, research, public information, training, fiscal management, and others. Recommendations were made at this conference for improvement at both the national and state level. Numerous references.							
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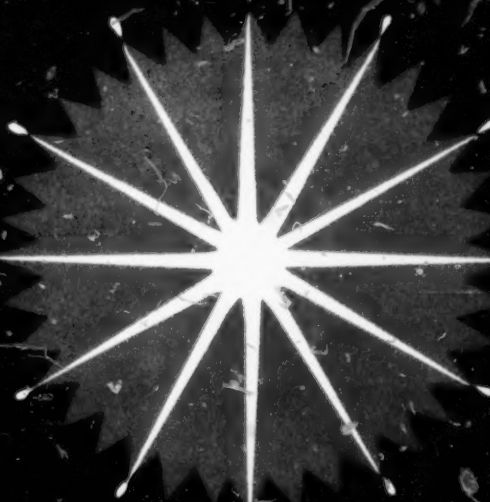
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Talent

A State's Resource



A State's Responsibility



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Talent

A State's Resource

A State's Responsibility

Report of a Conference of State
Department of Education Direc-
tors of Programs for the Gifted

Convened by the U. S. Office of Education

Edited by

J NED BRYAN, *Chairman*
Professional Committee
Office of Education Talent Development Project

U.S. DEPARTMENT OF
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Foreword

FREEDOM MUST BE CONCEIVED of not only as freedom from deleterious elements in the environment but also as freedom for the development of individual gifts. A society which fails to invoke high aspirations and challenging opportunities for its more able youth may well lose its most precious asset. Survival, in a technological and ideological sense, is no longer possible for a society which neglects to identify and nurture talent.

The gap between the supply of creatively and intellectually able individuals in America and the demand for the services of highly talented people is constantly widening. It is time for systematic provisions to be made at the State and National levels to examine critically the issues involved and the solutions proposed.

Key to the development of provisions for gifted and talented children and youth at the State level will be State department of education personnel directly concerned with such programs. To examine their role, the Commissioner of the U.S. Office of Education called a conference in Washington, D.C., April 16-18, 1962. Departments of education which were represented at the conference by full-time directors of programs for the gifted were those of California, Georgia, Hawaii, Illinois, Minnesota, New York, North Carolina, Ohio, Oregon, Pennsylvania, Puerto Rico, Texas, and Washington.

Material presented in this publication is an outgrowth of the conference and is presented in five sections: (1) Formal addresses given during the conferences, (2) a discussion of selected problems facing a State director of programs for the gifted, (3) an examination of the growth of established State directorships of programs for the gifted, (4) recommendations of the conferees, and (5) appendixes which include a directory of State department of education personnel directly concerned with programs or provisions for the gifted, a list of research projects which are supported by the Cooperative Research Branch of the U.S. Office of Education and which are related to the education of the gifted, and bibliographies of State department of education and U.S. Office of Education publications about the gifted.

The conferees made this publication possible through the informative materials they brought to the conference, their contributions during the conference, and their reviews of the manuscript. State department of education personnel for each of the States not represented at the conference were very cooperative in providing requested information and data. Mary R. Routh, conferee from the Pennsylvania Department of Public Instruction, was especially helpful as a consultant during the preparation of this publication. Resource persons and interested personnel both in and outside the U.S. Office of Education gave insight into the issues and problems of education for the gifted. The task of writing the report was done by Marilyn R. Stafford, Jean M. Dickson, and Lurene M. Noland, research assistants to the U.S. Office of Education Talent Development Project.

ERIC R. BABER,
Assistant Commissioner,
Division of Elementary and Secondary Education.

J. DAN HULL,
Director, Instructional Programs Branch.

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Conference Addresses

Welcome to Conferees

RALPH C. M. FLYNT
*Associate Commissioner,
Bureau of Educational Research and Development
U.S. Office of Education*

IT IS COMMENDABLE that there are now enough people at the State level who are directly and officially concerned with the gifted for a national conference to be held. There would have been no such meeting a few years ago; there was little concern for the gifted. The States represented are to be congratulated because they have taken the forward step which is recognized in this conference.

Today it is important to face the challenge of preventing talent loss within the current school process, particularly of the gifted and the creative. After 40 years of attempting to reach all secondary school youth, we now have recognized that the creative and the gifted persons are the most likely to be overlooked in the comprehensive secondary school. The challenge for us then is to find the proper place for these pupils.

Challenges

It is hoped that this conference will address itself to two goals. One is to proceed as far as conceivably possible with a definition of the gifted which will be workable within an organized school system. The conferees should not be concerned solely with the verbally articulate and the intellectually bright. Gifted pupils in the fields of music and the fine arts are not easily identifiable in our present school system. There are many brilliant people who contribute constructively to their societies, but who are not articulate and do not have well-balanced sets of test scores.

The second goal is to bring dignity and respect to the gifted.

Our society sometimes seems to be afraid of bright people; perhaps it does not respect real brilliance, or else it puts too much value on conformity. Research indicates that parents and teachers in our schools sometimes do not know what to do with bright people and in some cases are not very sure they even want them.

It would seem then that we have much to consider; the future is at stake. It is very clear that the relatively small population of the Western world is quite outnumbered and that the whole concept of Western civilization is in danger of being overtaken by people promoting other ideologies. Ultimately there will be a billion people competing with our three or four hundred million as we enter a long period of intellectual contest.

Conclusion

In summary, the goals of this conference should be to broaden the concept of the gifted to include all the areas of giftedness and to bring about some understanding on the part of society of the necessity for nurturing excellence. Whatever one may say about the strong "C student" who does the "work of the world," it is the bright pupil who makes the breakthrough.

It is with pleasure that the U.S. Office of Education calls this conference, and we express our appreciation to all those in attendance.

Quality in the Educational Endeavor¹

STERLING M. McMURRIN
Former Commissioner of Education
U.S. Office of Education

THAT THERE is great need for improvement in the quality of education at all levels should be entirely obvious when we frankly assess the present condition of our schools and acknowledge the grave problems that face the Nation.

As for our national situation, it is clear that the development of our culture in all its aspects, the resolution of the tense domestic issues which face us, our fitness for the world leadership that history has conferred upon us, and indeed the very survival of the Nation itself—all depend in large measure upon the quantity and the quality of our educational achievement.

As for the character of our education, it is equally apparent that, although our institutions are making notable strides toward a higher quality of education and although there is now a greater public sensitivity to the importance of this endeavor, we have yet to provide adequately the opportunities commensurate with the highest intellectual capabilities of every student.

Future Educational Tasks

There is an increasing realization that provincialism and complacency seriously impede our efforts to secure the educational quality needed for the future. There are things ahead that were undreamed of in the past. Only a vision that can honor the solid achievements of the past, yet grasp the large possibilities of the future, will provide the motivation that is now demanded of us. Only an attitude that cultivates and respects vigorous criticism, both from within and from without the education profession, and that elicits a courageous determination to move forward will

¹ Resume of former Commissioner McMurrin's extemporaneous remarks at the conference.

properly nurture that motive. Only the broad sensitive perception that can embrace the world responsibilities of the educator and the educated man, yet not lose sight of the individual values that lie at the center of our democratic educational purpose, will bring proper discipline and direction to the efforts that must now be concentrated on the central tasks of education.

Quality of School Personnel

Much has been done and more remains to be done to improve the conditions for education and to sharpen the instruments that it must employ—better classrooms, laboratories, and libraries; greater refinements in the use of a multitude of media, old and new; and more research in the nature of the learning process. Yet in the last analysis, as always in the past, the quality of our schools will depend primarily upon the quality of our teachers and of other responsible school personnel. We can no longer tolerate conditions where large numbers of our teachers are less than talented and competent in the degree that their vocation should demand or where staff aspirations are too low. Our society must commit its highest-quality human resources to education as readily as it gives them to medicine, law, engineering, business, industry, or government. Until then, our people will not possess learning and the love of knowledge to the degree which they should; teaching will not really be the noble art that we profess it to be; and it will not enjoy the public esteem that an advanced society should confer on the activity that determines its quality and strength.

The argument that there is not enough high-level talent to go around is of little merit. It is now clear that we have far more potential talent than we recognized in the past; and as the quality of our educational endeavor improves, that talent will be discovered, nurtured, and brought to usefulness.

Certainly, different kinds of temperaments, sensitivities, interests, and native competencies are required for different professions. The best space engineers, for example, might not make effective science teachers. The point to be made, however, is that the teaching profession makes large and varied demands upon every person who follows it. The time is indeed past when we can afford to entrust the tasks of education to those of average or less than average ability, or with average or less than average educational accomplishments of their own. At every point we must work to raise the competence of teaching personnel.

Content of Education

Nothing in recent years has done more for the quality of education in this country than the development of a large interest in the content of education at every level by scholars of the highest competence and achievement in a wide variety of fields. This is most fortunate for the gifted student, who too often in the past has been the victim of serious neglect. The gifted person deserves a rigorous education in a specialized field of the type that can be made available to him when highly qualified scholars turn their attention to the needs of education. And above all else he deserves a genuine liberal education.

An Educated Man Defined

When we are discussing the quality of education for free individuals in a free society, we must have a clear conception of what it means to be an educated man. We can say at least that an educated man is in constant pursuit of true knowledge, is realistically aware of the world around him, is comfortable with ideas and concepts, is endowed with a cultivated curiosity which lends itself to creativity, is disciplined by a reason tempered by sensitive emotions, has an understanding of himself and his own capabilities, and is hopeful for the future without denying the tragedies of the present.

Conclusion

To identify those individuals with native talent who are capable of satisfying such criteria in a large measure, to provide for them the opportunity to achieve genuine erudition and intellectual sophistication, and to nurture fully those important personal and civic virtues that must be the concomitant of knowledge if our schools are to succeed in their primary task, which is to disseminate knowledge and cultivate the intellect—these are the responsibilities of our society as a whole, and they are especially demanding of us in the educational profession. Nothing less than a massive and determined educational effort will produce the knowledge, skills, attitudes, and critical intelligence necessary to maintain the general welfare and secure the foundations of our society.

The Differentiated Educational Process

VIRGIL S. WARD

Professor of Education

University of Virginia

*Director, Southern Regional Project for
Education of the Gifted*

IT IS A RARE personal pleasure to be among professional colleagues centrally concerned with education of the gifted. While there are but a small number of people at this conference, the nature of the situation is germinal. Those in germinal positions must be sound in what they say and do, for the effects of their words and actions are widespread in impact. Theory, in itself eminently practical, transpiring here has the potential of reaching every area of the Nation. Those in this conference therefore share a high responsibility and a high privilege.

Underlying Assumptions

The educative process—the classroom endeavor—is the end toward which our labors are ultimately directed. There are three assumptions underlying this process as it relates to the gifted.

An Identifiable Group.—First, it is assumed that there is an identifiable group of youngsters, in significant numbers, whose learning potential largely transcends present school requirements. The abilities of some youngsters in our schools today are comparable, evidence leads us to think, to those of historical men of genius, such as Lincoln, Washington, da Vinci, Faraday, Franklin, Jefferson, Bacon, and Voltaire. Some of the youngsters about whom we are thinking and about whom we are concerned today obviously are comparable in their human potential to such great men of the past.

Gifted Child—Gifted Adult.—There is evidence to the effect that the promise of youth tends to bear itself out in adulthood. The second assumption then is that it is not idle to identify extremely bright or talented youth and to attempt to work toward the improvement of the educational process for them, because these youngsters on

the whole tend to produce the advances in every phase of contemporary culture. They become research scientists, creative artisans, technologists, military leaders, and statesmen. They are people who *advance* human welfare, who *change* things rather than merely perpetuate them in their present form. These people are reconstructionists of culture as distinct from mere participants. The problem is one of educating youngsters who are extraordinarily able, who are markedly deviant from those in the middle range of abilities, and who will no doubt assume roles and responsibilities in adulthood which are similarly deviant.

Deliberate Efforts—Improved Education.—The third and last assumption is that deliberate efforts to find differentiated processes will yield improved education. It is recognized, of course, that whatever the members of Terman's group¹ did, they did without benefit of any particular kinds of exceptional education. It is important to believe, however, that deliberate efforts to alter the educational process can improve it. What merely occurs by accident is seldom as good as that which derives from deliberate application of human reason and human imagination.

Several needs seem apparent. First is the necessity to discover more of those talented youngsters who might otherwise be sloughed off in the usual processes of culture. Genius will not always "out" on its own. Second is the need to develop their extraordinary capacities more efficiently and more fully through specifically adapted educational experience. Then, third is the need to launch them into their productive adult roles earlier than the sort of come-and-go process of education allows at present; a promising youth on the low end of the socioeconomic scale is quite often in his middle thirties or early forties before he makes his mark as a scientist and achieves enough status to exercise his creative talents. If special provisions for the gifted youngsters are made, this process can be abbreviated; every year that is so gained is a year to the advantage of society.

Action

Disciplined Differential Education.—Now what do these assumptions mean by way of action? Differential education for the gifted must be worked out within a framework of logical discipline. This is not now the case, and it has not been the case for the past

¹ Lewis M. Terman. *Mental and Physical Traits of One Thousand Gifted Children*. "Genetic Studies of Genius, Volume I." Stanford, Calif.: Stanford University Press, 1947; Lewis M. Terman and Melita H. Oden. *The Gifted Group at Mid-Life: Thirty-Five Years' Follow-up of the Superior Child*, Palo Alto, Calif.: Stanford University Press, 1959.

10 or 12 years. Almost any kind of school experience has been suggested in recent years as a special experience for the gifted. Some of these are learning foreign languages in the elementary school, making charts and maps, working on the school newspaper, participating in the much-vaunted seminar experience, and writing autobiographies. Such experiences as these are good for everybody. Yet they have been picked up and heralded as especially fitting for the abler student. New ink has been put on old paper in stating that these are in and of themselves appropriate experiences for the gifted. T. Ernest Newland of the University of Illinois has indicated that almost every "old-fashioned," progressive technique that has evolved in the history of American education has been newly labeled as something good for the gifted.

Now this piecemeal kind of thinking comprises an incipient failure of a very significant movement. The conception of differential education must be more disciplined. Whatever experience is proposed as differential or special experience for the gifted must do two things:

1. The higher degrees of capacity which these youngsters possess and the characteristics which identify them in the very beginning must be involved in a kind of experience designed as special for them. By this criterion whatever is proposed as special experience for the gifted is by its nature unsuited for those who are not gifted.

2. This special experience, further, must point toward the deviant roles which these individuals are expected to attain in the culture as adults. It must point toward the anticipated adult roles as cultural frontiersmen, as cultural reconstructionists. By the same token, whatever special experiences are devised for the gifted will be unnecessary for others. Students of middle-range abilities not only are unable to handle these experiences, but also have no need to handle them.

These are simple requirements. Yet these straws make a broom which sweeps through all the clutter of chatter that goes on about the gifted these days. A clean sweep leaves only the important germ of the substance. Now these two requisites for any special experiences for the gifted—that they involve higher degrees of capacity and that they point toward the anticipated adult role as reconstructionist—must occur. These mandates must be tempered by a world setting that has been radically transformed through science and technology. Society's material means and processes, its values and social practices are so new that someone has aptly said that modern man in this modern world is essentially a different phenomenon from what man in his world was one hundred years ago.

These disciplined conceptions enable us to look at every pro-

posals, whatever grade level or whatever subject matter, with criteria to judge some practices valid and others invalid. Expressed another way, these criteria can be termed the *principle of relative uniqueness*.

This principle of relative uniqueness does not imply a complete overthrow of the regular curriculum. The school organization and administrative procedures and curriculums are essentially valid. Professional common sense realizes that one cannot overthrow the entire organized American school system. It is not necessary. The school process is a good, valid one if proper adaptations are made—purposeful for the gifted, though by no means sufficient. This principle of uniqueness does not imply merely “more of the same” with longer assignments or more books to be read within the conventional framework. It does not imply merely studying a subject faster or placing it in a lower grade. It does not imply merely improved teaching of standard subject matter. Rather, this principle implies a kind and a sequence of experience—books, assignments, teaching methods, subject-matter content, pupil responsibilities—largely undeveloped as yet and radically different from the typical school regimen, comprised as it is of carefully isolated segments of established subject matter.

Considered against the concept of the graded school, the problem of the search for the relatively unique experience is clear. All general school practices are based upon what children in general can and cannot do. The graded textbooks—third-grade readers, fifth-grade language arts books, seventh-grade arithmetic books—are based upon this notion. The length and the complexity of assignments progressively advance on the basis of what children in the middle stream of abilities can and cannot do. Teachers evaluate pupils' efforts on the basis of what they think the main stream of children can do. Teachers are taught about child behavior, attitudes, values, and expectations; and standardized tests are molded out of these essentially normative expectations. In short, the bulk of educational energy in the American school system is directed toward the mass of children, who represent the norm. This is a practical necessity, and it is a mandate of democracy. We are not against it at all; we are merely saying that this is education for a certain segment of the population, a large one, which does not satisfy the needs that are represented in our particular interest. It is ridiculous to speak of “forgetting the average.” The very bricks in the schoolhouse wall were planted there to serve the average person. It is the neglect of those who are *not* typical in abilities that has caused the recent decade of concern.

Now the logic of differential education for the differentially endowed is based on the normal distribution of human abilities, as it is known. At some point on the normal curve there comes a level of deviance in ability where the content, the organization, and the type of experiences that are conceived to be educative for the middle mass of persons become less suited to those who are deviant either upwards or downwards. Now there is a 30- or 40-year history of good and excellent curriculum modification for youngsters with various types of handicaps. Educational objectives, educational materials, and educational methods, for example, have been adapted *downward and inward* to serve better the educative needs of mentally retarded youngsters. Those interested in differential education for the gifted are highly sympathetic with this service and are interested in its continuance. The upper end of the scale, however, presents a different picture. Curriculum adaptation *upward and outward* has no such extensive history. The problem has been difficult to see, since there are no physical handicaps or mental deficiencies. It has been difficult to believe because heart-strings are not plucked through appeals on television marathons or on the streets of local shopping centers. Needless to say, the task of curriculum modification upward and outward is far, far more difficult than the task of curriculum adaptation downward and inward. The teacher within the present graded school knows enough arithmetic to teach it to average or dull-minded children but may not have at her disposal means of satisfying a fifth-grade youngster with a particular aptitude in mathematics. Within a school structured for differential education, the teacher is able to reckon with all questions fairly and adequately and provide the student with a means of answering his own questions.

This concept of uniqueness—the search for experience that adapts the regular school experience upward and outward toward a transposed and a transformed plane of experience—involves new subject matter and new formulations of old subject matter. This curriculum sought for must be just as distinct from the middling character of school tasks as the youngsters themselves are distinct from the middle mass of persons. Immediately, one recognizes that so many of the things proposed as special education for the bright youngster simply do not conform to these criteria. The unique curriculum with its content and sequences specified becomes a study on a transposed plane of experience. This study is, again, not within the ability of the average child, nor is it within his need.

Applications.—How does this theory of differential education for differentially endowed persons apply? Dewey's idea that sound

theory is eminently practical applies here. It is also at this point that those in germinal positions should outline their responsibilities, taking care that their proposals are very sound; for unfortunately it is not only sound ideas but also erroneous ones that germinate. The implementation of theory, the search for the relatively unique, can be applied to three aspects of the educative process—objectives, content, and method.

Particularized educational *objectives* should pertain predominantly—not necessarily exclusively—to the gifted. Although it may be desirable to verbalize about life span education for everybody, it is not simply verbiage for those whose role it is to advance culture. These people must continue to reckon with new knowledge in their own fields, and they must occasionally learn new fields. It is not at all unusual for research scientists in sociology or anthropology to break from their main discipline in order to study mathematics and statistics for a year or two and then to return to their own subject. That pattern of behavior will be more frequent as the rate of acquiring new knowledge increases. So one educational objective that pertains with deadly seriousness to education of the gifted is that it must be planned for the life span. One could take that single particular objective and go right down into the curriculum and spell out how it applies, for example, in terms of what kinds of foreign language instruction or what kinds of sciences are to be provided for these youngsters even in grade four.

A second particularized objective concerns the problem of both general and specific education for bright youngsters. Not only must we transmit a general body of culture, a body of shared values and understandings which is general education for citizenship, but we must also perform the priceless, rare task of developing specific genius, "that" in Leonardo da Vinci which is exclusively Leonardo da Vinci's. Despite all the bushel baskets full of words that suggest we know the nature of extreme aptitude, we do not know how to identify it or how to develop it. But a discussion of education for the gifted must include the task of realizing the peculiar essence of genius as well as we can now, and the prospect of being able to recognize it better as the behavioral sciences advance.

Another particularized objective is education for reconstruction. These students can learn the normative facts and principles for themselves. Facts of history, principles of biology, techniques of mathematical computation come easily to them. The educative process, the teaching process, must be reserved for levels of understanding that are problematic for these youngsters. The objective of the teaching-learning process then becomes not simple learning

itself, but rather, learning for reconstruction, at the level at which knowledge is produced. These youngsters need to learn not so much knowledge per se, but knowledge about knowledge. Not simply the facts that have been discovered by given methodologies or given modes of inquiry, but methodologies and modes of inquiry themselves become the substance which helps gifted students in their future roles as researchers and social leaders. Putting methods of inquiry into the educative process allows planning for elementary youngsters who have particular aptitude for a sustained long-range endeavor in basic sciences. These students do not then "peel off" into applied branches of the fundamental sciences.

These are just three illustrations of particularized objectives. Local schools must supplement the list. Without a set of particular objectives, they are likely to be looking into the wide blue yonder.

The second aspect of the educative process to be particularized is *content*. Two very familiar notions are extensification and intensification, and all the particulars can be subsumed under those two concepts if the concepts are used in a disciplined fashion. If the experience which is an extensification or intensification of the curriculum truly involves the development of higher mental processes and if it serves the kind of role that these youngsters are headed for in the main, then the experience is successful. But extensification and intensification must apply systematically across the curriculum. It must not be, as we so often find, selectively applied to single grades, single schools, and single subjects. The youngsters being "enriched" in the fourth grade now are going to be in the fifth grade next year, and they were in the third grade last year. Even if that enrichment were in arithmetic, and through all grades, the youngsters would find their brightness unchallenged in their studies of geography. So these efforts to intensify and extensify the curriculum must be systematic; they cannot be applied without reason to disparate parts of the educational spectrum.

The last consideration is that of particularized *methods*. Two methods, which take account of extraordinary abilities and look toward the role that these youngsters will play as reconstructionists, recognize the need for what might be called a reverse ratio in teaching and a reverse ratio in the level of discourse. The ratio of teaching to self-directed learning can literally be reversed for these youngsters because of what they are and what they can do. Teachers think they have to teach most children what they want them to know, and that is the reason for their jobs. The brighter youngsters can learn for themselves what is ordinarily taught them.

We need to arrange an instructional process through which they have the privilege of teaching themselves that which teachers now unnecessarily teach them. The reverse-ratio concept allows larger amounts of time for self-directed learning and teaches teachers how to retire gracefully from the dominant focal spot in the classroom.

In the classroom where learning is directed by the teacher, most of the discourse takes the character of fact-giving and fact-getting. It is descriptive in its nature as distinct from problematical. A reverse ratio in the level of discourse will change the classroom discussion so that it will be predominantly centered on the questions about, the search for, the inferences from, and the applications of, what is known. Bright youngsters will know the facts they need to know at the appropriate level.

Conclusion

The discussion and these illustrations of the educative process as it can and should be differentiated for the gifted show that the task is difficult. This challenge requires deliberate effort in the continuing search for relatively unique formal experience and in beginning to apply this principle in the areas of objectives, content, and methods. This task is a great endeavor with extreme significance for our society.

The Role and Responsibility of the State Department of Education Directors of Programs for the Gifted

CHARLES E. BISH

*Director, Academically Talented Student Project
National Education Association*

THE STORY of a second-grade art teacher and her pupils demonstrates the seriousness of the role and responsibility of the State department of education directors of programs for the gifted. The teacher had asked her pupils to paint a landscape. They busily set about the assignment. After a while, the teacher strolled around the classroom to observe the results. As she viewed one little boy's efforts, she noted that the entire landscape consisted of a strip of blue color across the top of the paper, a strip of brown running across the bottom of the page, and a little black dot painted on the brown. The child pointed to the black dot as he said, "That's me." The teacher took the child to the window and pointed out the scene before them. "Do you see the horizon over there? Don't you see," she asked, "that the blue and the brown should meet?" The child answered, "Oh no, ma'am, they don't meet; I live over there."

The teacher, for the moment wrapped in the straitjacket of tradition, does not see the sense in the statement the boy makes. The statement is actually a question, a question about the nature of the world as he empirically knows it and the nature of the world as his teacher asks him to see it, a world where the earth and the sky meet. A wise teacher with a new response to an old question could channel the boy's thinking as he stands alone on the brown earth and looks up, perhaps into the space concept. The underlying responsibility of the State departments of education is to help develop a curriculum that will be effective in giving the boy the kind of responses and experiences he needs to live in a world far more complex even than the one we live in now.

Role of the State Program Director

The State director, although sitting alone in an office in his State capitol, is surrounded by many differing school systems, each

trying to provide answers for the child who stands on a strip of brown under a blue sky where the two colors do not meet. As director, his is a position of supervision and leadership. The principles of supervision must therefore not be violated. Whereas a bustling director might insist that his pet ideas be used to solve immediate problems, a good supervisor will improve existing programs within the context of present procedures. He will start with the program as it is; and he will support, assist, and share in the responsibility for, improvement by providing leadership. Because the best leadership seems to come from within, the State director will provide a kind of internalized action for each of the several schools in which he works. The leader who openly directs by imposing a prepackaged plan on a school or a school system will create problems.

The leader will often find himself in the position of Stanton, Lincoln's Secretary of War, who, when he was having great difficulty with a general, decided to mail a letter expressing severe criticism. The reprimand was so harsh that Stanton brought his letter to Lincoln for review. Lincoln assured him that it was excellent and that every word was justified; Stanton was pleased. Then Lincoln asked him what he planned to do with the letter. The reply was that he would dispatch it immediately. The President advised him to file the letter because it was too good to be mailed. The State director also should file his plan. With it in his pocket, he can adjust to what he finds and maintain his objectivity, a major part of his role of leadership.

An objective attitude will enable the State director to make constructive suggestions while working in a cooperative effort with the local administrators in their distinct situations. He is free then to find all the undefined problems of the individual principal, the funds he has available, the staff with which he must work daily, the local sentiment which he must consider. He can identify with the principal, the school, and the community; understand their goals; and leave them with a step-by-step procedure, a workable strategy. The director, working along with the principal and his staff, using a kind of Socratic method, can make the best use of his plan for a program. This then is the quality of leadership: the ability to be objective in suggesting, cooperating, and identifying.

Role of Society

Just as a State director cannot change a school by imposing a plan on the principal and the school, he cannot thrust his plan on an

unwilling society. Whereas our society is one which says that everyone has the right to succeed, it must become one which reflects the true democratic principle of individual dignity and worth. A democracy does not fail because every person does not succeed; a democracy fails only when every person does not have the right of "access to opportunities" that will enable him to succeed according to his abilities. We have not yet given every youngster in our schools the full measure of the right to succeed in accordance with his ability. The gifted and talented student, whether he be one of the 1 to 2 percent Terman chose to call gifted or one of the 17 percent the National Education Association calls academically talented, has not yet been given the opportunity to reach his highest level of achievement.

As society understands that this student, as well as the average student, must be taught according to his abilities, that the school is in this sense an essential instrument of democracy, it will give more and more of its resources to the school. In order to meet the currently critical problems caused by automation and by the population explosion, society must give more of its gross national product to education.

It is amazing to observe how sensitive our schools are to the need for basic changes in organization. The day has come when struggling to keep youngsters scurrying from bell to bell into cubbyholes into which 30 pupils will fit is not enough. Administrative arrangements that do not lend themselves to differentiation, that are limited by the Carnegie unit, do not take care of individual differences. Standardization, which at one time brought organization out of chaos, will soon have outlived its usefulness. Controlled flexibility is providing a way to take care of the teaching of children with a greater measure of individualism, and will give them greater psychological safety to ask questions, to raise issues, and to work alone. Opportunity for access to experiences which will enhance the growth of creativity must be provided in greater measure. The school can fulfill its democratic promise only by the wisest use of its resources.

Conclusion

The features of a successful program are many. They include the orientation of the faculty, students, and community to programs for the gifted; the identification of gifted and talented students; controlled flexibility of school organization; a better understanding of mental abilities; and provisions for effective evaluation.

New instruments to measure creativity, to measure the effects of anxiety, and to evaluate readiness in terms of content difficulty are also needed.

We must continue to work for better solutions of such administrative problems as scheduling, programing, teacher assignments, and grading, to mention but a few. All of these areas demand the attention of the State directors of programs for the gifted. This position is as important as any in education, and the rewards it will provide will be of the same measure as its importance.

The Role of the U.S. Office of Education in the Education of the Gifted and Talented

J NED BRYAN

*Specialist, Education of Gifted and Talented Children and Youth
Chairman, Professional Committee, Talent Development Project
U.S. Office of Education*

THE U.S. OFFICE OF EDUCATION Talent Development Project provides a structure designed to coordinate efforts within the Office and to make possible a more effective interaction between the Office and the many groups across the Nation that are active in the identification and nurture of talent. The role of the Office in talent development can be subsumed under three broad categories: the gathering, processing, and distributing of information; the encouraging, sponsoring, and conducting of research; and the providing of assistance in planning and implementing effective practices. To fulfill this role, the Office must work closely and effectively with State departments of education, appropriate government agencies—both Federal and State, educational associations, colleges and universities, and other lay and professional groups.

Provide a Clearinghouse for Information

Information germane to the identification and nurture of talent is widely dispersed in the findings of research and practice. The approach of the Office Talent Development Project is one which can (1) establish periodic datum levels upon which inferences can be based, (2) provide current, effectively processed, and readily available information, and (3) establish and maintain systematic and critical examinations of data and information as a basis for determining needed research and effective practices. With the cooperation of State departments of education, institutions of higher education, and selected professional groups, the Office can provide a clearinghouse not only for published materials, but also for the many practices and bits of "fugitive" research that are so

difficult to find. This aspect of the Office role is that of supplying the literatures so necessary for any effective program of research or action.

Conduct and Authorize Research

The Talent Development Project can play a significant role in research. It can (1) direct the attention of the best minds in our society to the solution of significant problems in talent identification and development, (2) consolidate and interpret existing knowledge in this area, (3) develop new and imaginative conceptual schemes as a basis for probing unknown elements in the discovery and nurture of talent, (4) reduce inadequacies in existing knowledge about talent development, and (5) establish theoretical bases and operational procedures for the development of effective programs of action. This role can be fulfilled through such activities as survey studies by specialists in the Office and the support of extramural research by individuals or groups.

Reports by specialists in the Office have produced such publications¹ as *Educating the More Able Children in Grades Four, Five, and Six* by Gertrude Lewis, *Guidance for the Underachiever with Superior Ability* by Leonard Miller, and *Independent Study* by Winslow Hatch and Ann Bennet.

Some 67 research contracts² administered by the Cooperative Research Branch of the U.S. Office of Education have been concerned specifically or in the main with the various elements of talent development. Illustrative of these research projects are (1) "The Identification, Development and Utilization of Human Talents" (April, 1959–June, 1963) conducted by John C. Flanagan, University of Pittsburgh, (2) "Creative Thinking in Children at the Junior High School Level" (August, 1959–August, 1961) conducted by J. P. Guilford, University of Southern California, (3) "The Discovery and Guidance of Superior Students" (August, 1961–July, 1962) conducted by John W. M. Rothney, University of Wisconsin, and (4) "Factors Influencing the Recruitment and Training of Intellectually Talented Students in Higher Education Programs" (November 1, 1961–September 15, 1962) conducted by Donald L. Thistlethwaite, Vanderbilt University.

¹ Note appendix D: Bibliography of Selected U.S. Office of Education Publications Relating to the Education of the Gifted and Talented, p. 92.

² Note appendix C: Cooperative Research Projects Related to the Area of the Gifted and Talented, p. 80.

Stimulate Action

The function of the Office in helping to implement programs of action is to (1) initiate and maintain, in the interest of talent development, cooperative working relations with State departments of education, associations of educators, and lay groups, (2) encourage the introduction and/or improvement of programs for identifying and developing talent at local, regional, and institutional levels, and (3) reduce the time required to apply research findings in educational practices.

In its efforts to encourage action, certain critical areas must be recognized, where failure to take action results in talent loss. These areas are many, but prominent among the concerns are failure to (1) establish, early in the elementary school experience, enthusiastic liking for skills in such areas as reading and mathematics, (2) establish habits of self-motivated intellectual inquiry at the secondary school level, (3) move talented individuals from secondary schools to institutions of higher learning, (4) encourage creativeness at the college level, and (5) establish and maintain the pursuit of inquiry through research in graduate schools.

Demonstration centers established with funds allocated by the Cooperative Research Branch of the Office should lead to more effective programs for the gifted in schools and school systems. Illustrative of this type of activity is a demonstration of the feasibility of early admission into kindergarten or the first grade³ of school. In Warren, Pa., 224 children, who range in ages from 3 years and 9 months to 4 years and 8 months and who are scheduled for kindergarten in September of 1963, were examined by two psychologists. The ones who seemed ready for school visited kindergarten and were observed by experienced teachers. The judgments of those teachers, along with those of parents, school administrators, and university educators, were the bases for early admission into school for a number of these children. This demonstration is primarily an attempt to gauge the effect of this form of acceleration of gifted children on the school system and on the community in general, while at the same time demonstrating that it is possible for a regular school organization to implement and operate such a program. The role of the principal demonstrator, Jack W. Birch, Professor in the School of Education, University of Pittsburgh, is to work closely with the school officials at all levels to advise and to interpret and collect data for evaluation and dissemination.

³ Ibid., p. 82.

Conferences and seminars should also lead to action. The U.S. Office of Education Talent Development Project proposes three types of conferences in fulfilling its share of stimulating action: (1) one or more national conferences of representatives of professional organizations directly concerned with efforts on behalf of the gifted; (2) a conference, perhaps annual, of full-time State department of education directors of programs for the gifted;⁴ and (3) a series of regional conferences for professional and lay persons in each of the nine areas served by the U.S. Office of Education. The goals established for the regional conferences illustrate the purposes conceived for this type of activity. They are as follows:

1. To identify provisions in elementary schools, secondary schools, colleges and universities, local school systems, and State departments of education for—
 - a. Discovering and developing talent in children and youth.
 - b. Motivating talented children and youth to high achievement.
 - c. Testing the effectiveness of efforts to identify, motivate, and educate talented children and youth.
2. To disseminate the following, relative to the identification, nature, and nurture of talented children and youth—
 - a. Research findings from studies sponsored or conducted by the U.S. Office of Education.
 - b. Information about the U.S. Office of Education Talent Development Project.
 - c. Information and materials developed by State departments of education.
 - d. Interim reports of projects, programs, and studies in progress.
3. To stimulate, in behalf of talented children and youth—
 - a. Realistic plans for cooperative involvement among the agencies designated by society to be responsible for and/or those agencies which are concerned with talent development.
 - b. Effective flexible organizational and administrative structures.
 - c. Commitments to programs of action.

Publications too can serve the Office role of stimulating action. Materials which are being developed by the Talent Development Project or which are planned for the near future include (1) a bibliography regarding the education of the gifted and talented student, (2) reports based upon proposed conferences, (3) a case-book of examples of significant practices for identifying and developing talent, (4) a series of brief bulletins and a handbook on guidance and counseling of the gifted, and (5) a series of articles describing project activities prepared for publication in professional and lay periodicals.

⁴ This report is the outcome of the first such conference.

Conclusion

As the plans of the U.S. Office of Education Talent Development Project materialize, new and perhaps different functions may become apparent. Its fundamental approach, however, must remain broad enough to encompass concerns for the talented from the kindergarten through the graduate school. Information, research, and action must include the preparation of professional personnel capable of directing talented individuals. The Office may well serve as a catalyst in its role on behalf of the talented, but the analogy can not be taken too literally since both personnel and resources must be expended if that role is to be truly meaningful and significant.

Selected Problems Facing State Directors of Programs for the Gifted

The role of the full-time State department of education directors of programs for the education of gifted and talented children and youth has not been completely defined. Its character may never be firmly fixed, nor is this necessarily a desirable goal. States other than those which were represented at the conference have initiated and are developing programs for the gifted. As additional efforts are made to provide for the gifted, new problems will arise and new dimensions in the role of the director will evolve.

During the course of many discussions, both formal and informal, the State directors attending the conference were able to bring into focus many of their common and distinct problems. Reviewed here are some of the focal problems indicative of those frequently faced by directors and those with whom they work.

Terminology

An initial step for a State to take in planning educational provisions for gifted and talented children and youth is, in all probability, that of defining giftedness. A legal definition of the gifted or talented may be necessary for legislative purposes, while detailed operational criteria may be needed for school implementation. Legal definitions in States represented at the conference reveal two basic policies.

Legal Definitions

A *highly selective* policy is one that restricts the program to the top 1 to 5 percent of the pupils in the State. For example, a mentally gifted minor in California is defined as a minor enrolled in a public primary or secondary school who demonstrates such general intellectual capacity as to place him within the top 2 percent of all students in the State who have achieved his school grade.

States using this approach may have chosen to specify a high degree of giftedness in their definition for one or more of several reasons. One reason may be labeled financial feasibility. Personnel in the State may have been convinced that it is better to concentrate funds on provisions for those with gifts of a high order than to dilute the available financial aid in an effort to provide for a greater range of talented pupils. Another reason may be labeled philosophical concerns. State personnel may have believed that provisions for the 1 to 5 percent would take care of the needs of those students whose abilities are so different from those possessed by students in the mid-range of abilities that differentiated education is necessary.

Those who take exception to a highly selective approach question whether it identifies all of the State's gifted and talented. The narrowness of range, they contend, forces the director to depend too heavily on instruments now available for measuring potentialities and achievements; such instruments may fail to account for cultural differences and opportunities. Further, those who prefer a broader policy question whether or not State funds are indeed being invested wisely if many capable and talented youths are being overlooked or excluded.

A *broadly inclusive* policy, in contrast to a *highly selective* one, admits the upper 15 to 25 percent of the pupils in the State. Most States which take this position, however, do make provisions for more selective grouping within this broad range. For example, it is recognized that while a carefully designed program may be provided for all pupils whose measured potential or performance places them in the upper quarter of the school population, those in the top 1 to 5 percent may well require more specialized educational experiences.

Illustrative of definitions and their implications for programs are the following:

1. Illinois, Minnesota, and Puerto Rico have planned their programs to include the "academically talented" (top 15 to 20 percent), which in turn includes special provisions for the "gifted" (upper 2 to 5 percent) and specific experiences for the "highly gifted" (top 0.1 percent). These programs also give attention to the "highly talented," the pupils who show unusual aptitude in one subject area.

2. Pennsylvania defines its gifted children as the "academically able" (upper 15 to 20 percent) and the "academically gifted" (upper 1 percent). The State also plans special attention for the "creatively able" and the "creatively gifted," the pupils with originality of plans, ideas, and solutions. Also included in the State program is the "talented pupil," who has a natural aptitude in a special field.

3. Hawaii describes the gifted child as one who performs in consistently superior fashion in some area of human endeavor holding positive promise for both self and society.

States broadly defining the gifted reflect the definition in their fiscal policy. For example, Oregon began its pilot program with \$250,000 appropriated for the "able and gifted" (upper 15 percent) and \$25,000 for the "educationally advanced" (upper 2 percent).

Operational Criteria

Once the State has established a legal definition of the gifted, the State director of programs for the gifted and his colleagues may be expected to determine operational criteria for identifying the gifted and talented.

In California, for example, a student must meet one or more of the following requirements in order to be identified as a "mentally gifted minor." As one of the alternatives, he must achieve a score representing an IQ of 130 or better on an individual intelligence test. (This evidence is now required for all "gifted minors" enrolled in kindergarten and grades 1 through 3 and will also be required by July 1, 1965, in grades 4 through 6.) As another, he must score at or above the 98th percentile on a group test of mental ability and on a standardized test of reading or arithmetic achievement. A third alternative is that he demonstrate exceptional ability as judged by teachers, psychologists, and/or school administrators and supervisors. (Not more than 3 percent of the pupils in grades 4 through 12 and, after 1965, in grades 7 through 12, for whom excess cost reimbursement is claimed, are to be identified by this last criterion alone.)

It should also be noted that the California State Department of Education stresses that the personnel involved in administering tests or in making judgments should be fully qualified and that while excess cost reimbursement to school districts is based only upon mentally gifted minors as identified by State criteria, local school districts are encouraged to develop their own operational definitions of giftedness and to build programs which give special attention to children which these systems define as gifted.

Oregon requests that a pupil participating in the gifted program, designed for the upper 2 percent, demonstrate on an individual intelligence test an IQ which equals or exceeds the 98th percentile and reflect on a group achievement test an exceptionally high intelligence and academic achievement in advance of the expectations for the normal age-grade placement.

Minnesota and Puerto Rico accept identification by a combination of group achievement and group intelligence tests, since the administration of individual tests is so costly. Oregon also favors this procedure for pupils in the program—the upper 15 percent of the school population.

In Ohio, the operational criteria are left to local school districts, and IQ limits of identification may vary according to local norms. A State survey found that school districts use varying combinations of such criteria as IQ, achievement test scores, school marks, aptitude test scores, interest inventories, and teacher and pupil opinion. Among those using the IQ, the cut-off point is most often from 125 to 129.

Hawaii uses the following procedures to identify and select gifted pupils in grades 4 through 8:

1. Initial referral is made of those students who have qualified on one or more of the following criteria:
 - a. A score of 130 or above on the total mental factors of the California Mental Maturity Test.
 - b. A total grade placement at the 98th percentile or above on the most recently administered California Achievement Test.
 - c. A recommendation on the basis of teacher judgment involving pupil observation, classroom performance, parent consultation, and reference to cumulative anecdotal records.
 - d. A high score on a definitive characteristics of giftedness rating sheet filled out by classroom teachers.
2. The following additional information is then secured about those students who have been initially referred:
 - a. Group retest scores using the Science Research Associates Primary Mental Abilities Test to confirm other available data. Total score of 125 or better qualifies; careful consideration accorded subtest scores.
 - b. Individual test scores in any case of marked discrepancies in identification data, using the Wechsler-Bellevue Intelligence Scales or the Stanford-Binet.
 - c. Special consideration of any boy or girl consistently evidencing attributes of high creative potential.
 - d. Professional evaluation of additional pertinent factors such as social, physical and emotional development, character, interests, and attitudes.
3. Final selection is determined by the school and district personnel after a review of all information on each candidate.
4. Followup procedures include:
 - a. Evaluation of pupil adjustment and personal fulfillment during the first quarter of enrollment in any special programing.

- b. Periodic reevaluation of each candidate who has been identified and selected.

Additional criteria for grades 9 through 12 replace or supplement above data as follows:

1. Placement at 95th percentile or above on the Differential Aptitude Test.
2. Placement at the 95th percentile or above on the School and College Ability Test.
3. A high score on specific tests of special abilities and achievement.
4. Teacher recommendation based on specific interests, aptitudes, and abilities.
5. Additional criteria as felt desirable and necessary relevant to specific circumstances within a school or district.

In North Carolina, the term "exceptionally talented child," as defined by the General Assembly, means a pupil properly enrolled in the public school system of North Carolina who possesses the following qualifications:

1. A group intelligence quotient of 120 or higher.
2. A majority of marks of A and B.
3. Emotional adjustment that is average or better.
4. Achievements at least two grades above the State norm, or in the upper 10 percent of local norms of the administrative unit.
5. Recommendation by the pupil's teacher or principal.

In addition, the exceptionally talented child in North Carolina may be defined as one with an unusual competence in a single subject or area of interest as revealed by achievement and aptitude tests. The responsibility for determining eligibility shall be vested in local boards of education, and evidence of eligibility shall be subject to review by the administrative and supervisory personnel assigned to this program.

Some States, such as Pennsylvania, prefer not to develop specific operational criteria on the grounds that these standards may become too rigid and inflexible for the program. Others, such as Illinois, are currently preparing operational criteria to fit within their legal definitions.

Professional Preparation

Unfortunately, there is relatively little evidence that colleges and universities have as yet taken seriously their responsibility for providing the unique preparation needed by those who will teach the gifted.

The paucity of specific preparation for teachers of the gifted is shown, at least in part, by a U.S. Office of Education study¹ in which 463 institutions were found to offer 1,976 fifth-year programs for classroom teachers. Of these 1,976 programs, only 16 clearly indicated that specific attention was being given to the area of the gifted child. Ten programs prepared teachers for education of the young gifted student, while six programs made no specifications. None was expressly designed for the secondary level. It should be noted further that even in these programs the preparation for teachers of the gifted seemed to be of a limited scope. Twenty-five courses in the 16 programs were concerned with the identification of the gifted, whereas other aspects of the program apparently received little attention.

The teacher's preparation for the specific role of teaching the gifted has at least two aspects: (1) He is equipped to comprehend the particular learning potential of gifted pupils, to recognize creative mental processes, to guide incipient thoughts by using the tactics of self-directed learning, and to construct tests skillfully. He also learns to understand the psychological processes and sociological pressures which buffet the student with unusual mental abilities. (2) The teacher becomes proficient in the subject he teaches. The teacher should be a scholar in some area of human endeavor, for his zeal will infuse his students with the vital ingredient of curiosity; scholarship is often "caught as well as taught."

Further, since it cannot be assumed that all teachers of gifted pupils will themselves be highly gifted, it is often necessary for the teacher of the gifted to undergo some reevaluation of his own attitudes towards students with abilities differing from his own. The opportunity to gain specific knowledge to aid him in the development of his philosophy should be provided as a part of his education.

It was not the feeling of the conferees, however, that a rigid regimen of disparate courses would provide the final answer. Rather, it was felt that a total curriculum growing out of the cooperative efforts of the colleges and State departments of education might well provide an integrated and complete preparation of the individual teacher.

In this light, it does not seem appropriate to advocate special certification for teachers of gifted pupils. Indeed, Pennsylvania, the only State represented in the conference which ever had such

¹ Harap, Henry. *Fifth-Year Programs of Classroom Teacher Education*. U. S. Department of Health, Education, and Welfare (OE-58008). Washington: U. S. Government Printing Office 262 p.

a certificate, has eliminated it. There seems to be a national trend toward the reduction of the number of types of teaching certificates offered by the States.

One method by which State directors of programs for the gifted can mitigate the ills attendant upon initial inadequacies in the preparation of teachers is to provide comprehensive inservice education. Some provisions commonly suggested are workshops at local and State levels during either the summer or the academic year. In California, for example, some of the teachers of gifted children met on college campuses during a summer. They had with them the records of the children who were to be in their classes the following year, and from these certain plans were projected. In Hawaii, staffs of local schools meet during the fall to delineate areas needing special attention. They specify their needs, such as a course in the nature of giftedness, to district personnel who review the various requests and provide those programs they can. Remaining needs are submitted to State personnel and an annual calendar of inservice meetings is thus prepared. Pennsylvania sponsors area workshops while county officers, using the State director as consultant, sponsor workshops for administrators. Workshops for teachers of the gifted are sponsored by Slippery Rock State College and the University of Pittsburgh. In addition, the current Pennsylvania curriculum study provides for a statewide committee on education of the gifted, whose members include administrators, counselors, teachers, college professors, and community representatives under the chairmanship of the State director. The function of this committee is to determine guidelines for program development and evaluation.

In several States, colleges and departments of education work together for inservice education for teachers of the gifted. In Georgia, the two groups jointly sponsor conferences and seminars.

Under Oregon's inservice program for teachers of the gifted, the State and local districts share equally the expense of sending teachers to conferences conducted by the State Department of Education. The State Department of Education also encourages extension courses, which are administered by the General Extension Division and financed by the registrants. During 1961-62 these courses engaged 193 teachers and administrators throughout Oregon in intensive study and discussions of application of theory and practices of educating the gifted to the public schools of the districts represented.

A summer program on creativity at San Jose State College in California includes demonstrations by closed circuit television.

Commercial television channels as well often carry inservice education programs.

Illinois has prepared two films demonstrating the teaching of gifted children and youth. The pupils involved are enrolled at the University High School at Urbana and have a mean IQ on the California Tests of Mental Maturity of 130 plus and a verbal IQ of 120 plus. "Point of View" is concerned with the teaching of seventh-grade English; and "Biology Plus", with self-directed learning of the skills of scientific inquiry.

Recruitment and selection of teachers is a major problem in most States. In the face of the grave need for qualified teachers, Washington permits resource persons from industry or other experts in specific subjects to teach special classes.

More effective cooperation between State departments of education and institutions of higher learning can help solve many of the problems related to the education of the gifted. Coordinated efforts would strengthen the preservice and inservice education of teachers, would make for greater continuity of provisions for the gifted throughout all their formal schooling, and would facilitate dissemination of the latest research findings. Some States represented at the conference have attempted to provide specific channels for cooperative efforts of this type:

1. A member of the Pennsylvania Department of Public Instruction staff helps establish more effective articulation between college and high school educational programs.
2. The New York State Education Department, the Oregon State Department of Education, and the Puerto Rico Department of Education have each assigned one of their members to work directly with advanced placement and college early admission programs.
3. The membership of the Ohio State Department of Education Advisory Committee for Programs for the Gifted includes such personnel as college deans of admissions.
4. The College-State Association of Minnesota includes a subcommittee directed toward college-high school relations.
5. Georgia has an active statewide Committee on the Gifted whose members include college personnel.

Finally, in his role as consultant, the State director of programs for the gifted should strive to keep teachers and administrators aware of the latest administrative devices designed to provide for the gifted. The organizational structure he endorses is important. Yet, the major consideration is not whether he prescribes an ungraded school, ability grouping, acceleration, enrichment, or any other such administrative provision. Rather, it is what is accomplished as a school implements one of these provisions that

becomes important. Whatever the method of organization, an administrator will find that his structures are empty frames unless he and his staff have an understanding of the instructional methods and the curricular provisions necessary to nurture giftedness.

Provisions in Small Schools

One of the special problems confronting State directors of programs for the gifted is that of establishing and maintaining effective programs for the gifted in small schools. Whereas students in schools with enrollments of less than 200 may receive much individual attention, there may be few provisions for the gifted on a group basis. Because small schools have so few students for whom to provide specialized services, they may seek State assistance for consultive services, supervision, inservice training, materials to strengthen school libraries, and seminars for students. In rural areas, the problems inherent in small schools may be compounded by distance from cultural resources and poor transportation.

Ohio is one State that has begun an extensive seminar program for small secondary schools. Whereas large schools within the State provide their own programs, gifted students and their teachers from small secondary schools meet in central areas under the direction of State personnel. These seminars provide simultaneously challenging experiences for the students and an opportunity for inservice education of the teachers. Small elementary schools have similar meetings, called interest clubs.

Among the various efforts and proposals being made in small schools to provide directly or indirectly more effective educational opportunities for the gifted are the following:

1. The Western State Small School Project, operative in Arizona, Utah, New Mexico, Nevada, and Colorado and financed by the Ford Foundation (\$750,000 for three years), includes the establishment of provisions for the gifted in both elementary and secondary schools.
2. The Catskill Area Project in Small School Design, Oneonta, New York, permits several individuals or small groups of pupils to work on different subjects at the same time, within the same room, under the guidance of the same teacher.
3. Some countries, such as Australia, find it feasible to use two-way radios to improve educational offerings, particularly for the gifted, in remote rural areas.
4. A proposal, not yet implemented, has been made that advanced placement courses for college credit be given by correspondence to rural school youth.

5. Publicly supported regional boarding schools have been proposed for gifted youth from isolated areas. To date, this proposal has received little favorable response.

Pupil Placement

Another problem, that of parental pressure to place a pupil in, or keep him out of, a class designed for high-ability, high-achieving students, must be met with tact and forthrightness. The conferees suggested that in eliciting parents' understanding and support in this matter, it is well to explain to them that the school provides many different educational experiences and that every effort is made to provide each individual with those experiences best suited to his talents and educational achievements. It was further suggested that the parent be given the option of having his child placed in any school program on a trial basis. For example, the parent should be able to have his child enrolled in a program for the gifted even if in the judgment of school personnel the child apparently lacks the ability to achieve well in a class of high-performing peers. By the same token, a parent should have the right to have his child admitted to a less demanding program although evidence indicates that he will be unchallenged in a class of peers from whom lower achievement is expected.

Many educational provisions are designed specifically for high-achieving gifted pupils and are not necessarily suited for the potentially gifted student with a consistent record of low achievement. Such a pupil may be at a disadvantage if placed with high-achieving gifted pupils in a course where successful performance depends on a firm grasp of background information and technical skills. In all probability, he should be placed in a less demanding educational environment; but provisions should be made at once to prepare him to compete successfully with his high-achieving intellectual peers.

Many such concerns can be met if guidance counselors work closely with students and parents and if teachers and administrators critically examine curricular offerings.

School Marks

School marks are one of the most persistently controversial aspects of programs for the gifted. Confronted with a high-ability group, teachers naturally expect high performance. Know-

ing, however, the unlikelihood that all members of even a highly selective group will achieve as expected, these teachers are reluctant to give "A's" to an entire class, even though the same students might have earned top grades in more heterogeneous classes. As soon as teachers start giving "B's" and "C's" to gifted students, however, they run the risk of losing from the programs those students who are mark conscious or whose parents fear that lower grades may narrow their children's opportunities for acceptance in a college of their choice or membership in honor societies.

A succinct statement of this problem is made by George S. Cunningham,² former Director of Mathematics Education, New Hampshire State Department of Education. Cunningham stresses that most college-capable students rely upon high marks to gain admission to highly rated colleges and secure scholarships. He points out, "They are in competition, not only with their own group, but also with the general run of college-capable students who are receiving a normal distribution of marks in courses that are necessarily less demanding."³ He cites a hypothetical boy, John, whose pleasure upon being picked for an honors class is considerably diluted when he receives a "C" rather than his usual "A." His pleasure will become frustration when his less able friend makes an "A" or a "B" in a less demanding course and secures admission to the college that turns John down. Cunningham further delineates the problem:

By definition, the mark of "B" indicates the type of work that is characteristic of college capable students at the high school level. The mark of "A" indicates unusually good work, distinctly better than that characteristic of the typical college capable student. The mark of "C" indicates a satisfactory performance that is below that exhibited by the college capable. It is apparent that we have, in effect, swindled John into a situation requiring "A" performance but yielding non-college capable results. We have underreported John's performance to the college admissions officer, giving the false impression that we did not believe that John's work exhibited college capability. We have tried to give John a self-image of mediocrity instead of confidence in his own abilities. It is time to examine the "expectation" of marks of a highly selected group in order to give us some marking standard that is realistic for this group.

From the very basis of selection of the Honors Class, John had a high expectation of receiving an "A" in a typical college-capable group. To give some quantitative basis, it is assumed that his probability of "A" is about 0.9. . . The expectation of "A" marks, in a class of 25 "Johns," is the binomial expansion of $(0.9 + 0.1)^{25}$. The probability of any number,

² Currently, Dr. Cunningham is Assistant Professor of Mathematics, University of Maine, Orono, Maine.

³ George S. Cunningham. *Let Us Be Fair to Honors Class Students in Marking*. (Mimeographed statement) Concord, N.H.: State Department of Education. 1962.

r , of "A" marks is $(25/r) (0.9)^r (0.1)^{25-r}$. An examination of binomial distribution tables will show that 22, 23, or 24 marks of "A" is highly probable. . . On rare occasions, a low of 21 or a high of 25 "A" marks might occur. If we have indeed properly selected our class members, we may reject at the 1 percent level of confidence the possibility of less than 21 "A" marks.

Teachers of these groups will notice that there is a wide spread of accomplishment between the lowest "A" indicated above and the highest "A." . . When we have a concentration of "A" students, there is an illusion of "low accomplishment" because of this spread. It is perfectly proper to extend some "extra" recognition to those who are high in accomplishment within the "A" group. It is not proper to down-grade the comparatively low (but actually high) student to a "B" category unless his level of accomplishment would produce "B" in a heterogeneous college capable class.

Some schools, recognizing the validity of this argument, give only grades of "A" or "B" to students in honors classes. If a student is not working up to the potential which placed him in the course, he is transferred. A further extension of the same idea would assure the student a grade of "A" upon his selection for participation in the class. His only threat would be removal from the class. These two plans depend for their success upon flexibility of scheduling and a strong counseling and guidance program.

Since a primary function of school marks is to indicate the probable college performance of the student to admissions personnel, the student's transcript should indicate the nature of the course in which he received his particular mark. Some systems simply use the word "honors" or the letter "H" in connection with or as part of the school marks earned in honors work. An alternative method is to print on or attach to the transcript a descriptive statement.

Where a wide range of marks is used in a high-achieving class, marks may be weighted in comparison with similar ones earned in less demanding classes. School marks used to evaluate performance in relatively homogeneous groups could be assigned quality points somewhat as follows:

School mark	Quality Points		
	High-achieving group	Average-achieving group	Low-achieving group
A.....	5	4	3
B.....	4	3	2
C.....	3	2	1
D.....	2	1	0

A pupil with a mark of "A" would be presumed to have performed at a higher level if he had received 5 quality points than if he had received 4 or 3 quality points for the same mark. Such a system of weighted marks provides a more realistic basis for class rank if rank is to be used to predict college success.

Evaluation

Most authorities on the subject of evaluation agree that the first step in determining the effectiveness of any program is a clear statement of objectives. Stating goals is not, however, the clear-cut proposition it might seem. Goals are not static, particularly in a relatively new field; they are ever evolving. In the absence of a clearly defined model program, the director of programs for the gifted must nevertheless form or accept some workable goals toward which he can work and against which he can measure his progress.

In his continuous task of evaluation, a director sometimes walks a narrow line. He must take care not to impose restrictive standards that destroy the workable flexibility of programs in local communities, while at the same time introducing enough standardization to make evaluation possible. An objective basis for his evaluation will be his knowledge of social science research methods and his familiarity with research findings on the gifted. Having this information, he can then prevent needless repetition of definitive studies and determine when replication is desirable in terms of differing local conditions. He must certainly have a close knowledge of the various local programs within his State in order to direct them without waste.

In attempting to evaluate his program, the State director must decide whether it is sensible to rely on the subjective opinions of teachers, students, and parents; whether it is feasible to provide control group experiments; whether it is valid to rely on achievement test results; and/or whether it is possible to determine how closely certain preplanned measures and goals have been approximated at the end of a stated period.

Each of these methods of evaluation is discussed in some detail by James J. Gallagher in his *Analysis of Research on the Education of Gifted Children*.⁴ Gallagher underlines the great necessity of objective measurements and delineates some of the problems in finding these measurements. He discusses, for example, the

⁴ James J. Gallagher. *Analysis of Research on the Education of Gifted Children*. Springfield, Ill.: Office of the Superintendent of Public Instruction, 1960, p. 59-65.

biases common to subjective opinion. He points up the need for control groups whose members are matched on many more factors than IQ and sets forth a plan whereby a group becomes its own control. Achievement tests, even when given before and after a program of study, will not indicate what the student might have done in a regular program, and are rarely designed to test the special qualities of gifted children such as creativity or leadership. Indeed, as Joseph L. French states in *Educating the Gifted*,⁵ achievement tests are standardized to the general population and "fail to reflect the extra enriching experiences enjoyed by the fast learner When the achievement of the rapid learner is measured by a test suited for youths several years older (mental age), we are not sure of the results because the tests were standardized for the older students." A California State Department of Education bulletin, *Educational Programs for Gifted Pupils*,⁶ discusses the evaluative procedures employed following a 3-year pilot study. Specific programs which were evaluated in this study included enrichment in the regular classroom, ungraded curriculum group, acceleration, cluster grouping, part-time interest groups, Saturday classes, special classes, community-sponsored programs, independent study, and honors classes.

The person in charge of evaluation should have a clear knowledge of all objective measures and should keep his goals constantly in mind, even as they change and grow, in order to appraise his program critically.

⁵ Joseph L. French, ed. *Educating the Gifted*. New York: Holt, Rinehart, and Winston, Inc., 1959, p. 458.

⁶ Ruth A. Martinson. *Educational Programs for Gifted Pupils*. Sacramento, Calif.: State Department of Education, 1961, p. 181-216.

Survey of Selected State Directorships of Programs for the Gifted

Evolution of the Position

THE PROCEDURES by which State department of education directorships of programs for the gifted were established depended upon the legal structure of the State. Three basic approaches were used in Puerto Rico and the 12 States participating in the conference. The position was established by specific legislation in California, Hawaii, Minnesota, North Carolina, and Oregon; by administrative action of the chief State school officer in Georgia, Illinois, Pennsylvania, Puerto Rico, Texas, and Washington; and by action of the State board of education upon the recommendation of an advisory committee in New York and Ohio. The directorship is variously defined as an administrative, supervisory, or consultive position.

Preliminary Studies

Regardless of the legal basis by which the directorship is established, impetus can be gained through use of a preliminary study commission. Most of the conferees believe that, ideally, such a commission should be established through legislative action based upon the recommendation of the chief State school officer. Such action focuses public attention on the need for services to gifted children and gains support from a great number of people and groups. Further, the recommendations made by a legislatively mandated study commission may more readily form the basis for subsequent special legislation or, as at least one conferee thought desirable, serve as a basis for the development of a program for gifted pupils as a natural outgrowth of the State department of education's general curriculum program.

A study commission probably should include a broad representation of lay people, teachers, school administrators, personnel from the State department of education, and consultants from

such related fields as psychology and sociology. Working together, the group assumes an advisory role. Lay people, as citizens representing the views of society, outline the general objectives of the projected program. The professional staffs translate these objectives into definite goals and design plans of action and methods for implementing them.

Specific functions of such study commissions have included the following: Assisting in planning and evaluating a 3-year study (California); advising on implementing legislation which established a special study project for the gifted (Illinois); assisting in formulating a 10-year plan of action, including experimental programs to be financed from the general education fund for a 3-year period (Georgia); exploring ways to enlist local support in implementing programs for more able children (North Carolina); advising and consulting with Director of Able and Gifted Children and the Department committee during a 5-year survey and pilot study activity (Oregon); and coordinating and promoting research related to local programs for the gifted (Washington).

Studies should be conducted over a long enough period of time to produce a set of recommendations for programs for gifted pupils. Each of the study commissions described by the conferees did make specific proposals to the State department for provisions and services which could be offered. Most of the studies resulted in the establishment of a full-time position in the State department of education of director of programs for the gifted. In Georgia, however, a full-time consultant on the gifted was appointed prior to the appointment of study and advisory committees.

Preliminary to a concrete plan of action, State department of education staffs may be called on by a study commission to conduct research and establish task forces. For example, they may be asked to bring together personnel from higher education, secondary education, elementary education, mental hygiene, guidance, and administrative to develop guidelines for cooperation among the several divisions of the department. In California, Illinois, New York, and North Carolina, data gathered as the result of study commission action have been used to develop legislation regarding education for the gifted.

Table 1 gives information about the name, function, dates of operation, and appointing officer or body of preliminary study committees in 10 States. It should be noted that some States have continuing study committees even though full-time State department directors of programs for the gifted have been appointed.

Table 1.—Preliminary study committees of 10 participating States, dates of operation, and appointing officer or body

State	Name and/or composition of committee	Dates of operation	Appointing officer or body
California.....	State Advisory Committee and State Department of Education Advisory Committee functioned as one committee under the chairmanship of the chief of Supplemental Educational Services.	November 1957–May 1959.....	State Superintendent of Public Instruction.
Georgia.....	Statewide Committee on the Gifted: composed of representatives from local school systems and universities. Advisory Committee to the Statewide Committee on the Gifted: composed of personnel within the State Department of Education.	1958... continuing..... 1959... continuing.....	Director, Division of Instruction; Coordinator, Services for Exceptional Children; and Consultant, Education of the Gifted.
Hawaii.....	Teacher Training and Placement..... Community Education..... Survey and Evaluation..... Identification.....	1956–1957..... 1956–1957..... 1956–1957.....	Chairman of the Territorial Commission on Children and Youth.
Illinois.....	State Advisory Committee.....	August 1959... continuing.....	State Superintendent of Public Instruction.
Minnesota.....	Subcommittee on the Gifted of the Minnesota Advisory Board on Exceptional Children.	November 1957... continuing.....	Chairman of the Minnesota Advisory Board on Exceptional Children.
New York.....	Regents Council on Readjustment of High School Education. Ad Hoc Advisory Council of Science and Technology.	1950–1954..... December 1957.....	Board of Regents upon request of the State Commissioner of Education.
North Carolina...	Commission to Study the Public School Education of Exceptionally Talented Children.	September 1, 1959–June 30, 1961..	Governor.
Ohio.....	Statewide Advisory Committee on the Academically Gifted.	October 1959... continuing.....	Assistant State Superintendent of Public Instruction.
Texas.....	Texas Education Agency Advisory Committee on the Gifted.	September 1960–January 1962....	Assistant State Commissioner for Instruction.
Washington.....	Research Committee on Education.....	November 1957–January 1961.....	State Superintendent of Public Instruction.

Legislation

The legislatures of eight States represented at the conference have enacted legislation specifically relating to the education of gifted and talented children and youth. In a ninth State, Pennsylvania, the legislature approved such a provision, but the Governor vetoed it because of insufficient funds. Pertinent legislative action within these nine States includes the following:⁷

California

Chapter 883 of the Assembly Bill 362, an act to add Article Fourteen (commencing at Section 6421) to Chapter Six, Division 6, of the Education Code, was approved by the Governor on June 27, 1961, and filed with the Secretary of State on June 28, 1961. The legislation reads as follows:

The people of the State of California do enact as follows:

SECTION 1. Article 14 (commencing at Section 6421) is added to Chapter 6 of Division 6 of the Education Code, to read:

Article 14. Special Educational Programs for Mentally Gifted Minors.

6421. (a) "Mentally gifted minor," as used in this article, means a minor enrolled in a public primary or secondary school of this State who demonstrates such general intellectual capacity as to place him within the top 2 percent of all students having achieved his school grade throughout the State.

(b) "Program" means a special educational program for mentally gifted children, including the identification of such children, which meets the standards established pursuant to this article and which is approved by the Superintendent of Public Instruction.

(c) "Participating pupil" means a pupil identified as a mentally gifted minor who for a school semester or a school year takes part in a program.

6422. For the purposes of this article, the general intellectual ability of a minor shall be evidenced by one or more of the following factors:

- (a) Achievement in school work.
- (b) Scores on tests measuring intellectual ability and aptitude.
- (c) The judgments of teachers and school administrators and supervisors who are familiar with the demonstrated ability of the minor.

6423. The governing board of any school district may provide programs for mentally gifted minors living in the district who are enrolled in kindergarten or grades 1 through 12 in the schools of the district and who may be expected to benefit from a program suited to their abilities. The governing board, subject to such terms and conditions as may be

⁷ Since legislation related to State programs for the gifted is not readily available and since such legislation provides a needed background for any serious student of the development of those programs, much of the legislation in this section is quoted directly and in some detail from the specified documents.

agreed upon, may contract with another school district for furnishing programs for such minors or may so contract for the education of such minors including the furnishing of such programs.

6424. The governing board of a school district, in providing programs under this article, may enter into agreements with a county superintendent of schools for those appropriate services to districts authorized in Chapter 6 of Division 7 of this code and for conducting programs for gifted minors enrolled in the schools of the district.

6425. Whenever during any school year a school district maintains a program, the governing board of the school district may, during the subsequent school year, apply to the Superintendent of Public Instruction on forms provided for that purpose for an apportionment to reimburse the district for the excess expense incurred by the school district in furnishing the program.

6426. The Superintendent of Public Instruction, if he approves, shall apportion to each applicant school district an amount equal to the total excess expense incurred by the school district in providing a program, except that the amount apportioned shall not exceed forty dollars (\$40) for each pupil participating in the program for one school year.

6427. There shall be appropriated from the General Fund of the State to the State School Fund each fiscal year, in addition to any other amounts appropriated, an amount sufficient to provide for the reimbursement of the excess expense to school districts incurred in providing programs. The appropriation shall not exceed the product of forty dollars (\$40) and 0.02 (two percent) of the units of average daily attendance of pupils in kindergarten and grades 1 through 12 in all of the schools and classes maintained by school districts and county superintendents of schools during the preceding fiscal year. The first such appropriation shall be made for the 1962-63 fiscal year.

6428. Whenever any school district proposes to provide a program, the governing board of the school district may apply to the Superintendent of Public Instruction for an advance apportionment for the purpose of defraying expenses incident to the initiation of a program including the identification of minors eligible to participate in the program. The application shall be made prior to August 15 of a school year in the form and manner prescribed by the State Superintendent of Public Instruction and shall include an estimate of the number of participating pupils for that school year. The Superintendent of Public Instruction, if he approves, shall apportion on or before September 15 to each applicant school district from the State General Fund, as an advance against future apportionments from the State School Fund to such district, an amount not to exceed forty dollars (\$40) for each estimated participating pupil.

6429. The Superintendent of Public Instruction shall furnish an abstract of all advance apportionments made to school districts of any county under Section 6428 to the State Controller, the Department of Finance and to the county auditor, county treasurer and county superintendent of schools of the county and shall certify such apportionments to the State Controller who shall thereupon draw his warrants on the

State General Fund in favor of the county treasurer of each county for the amounts apportioned to the districts of the county.

6430. All moneys received by the treasurer of a county under Section 6428 shall be credited by the treasurer to the general fund of the school district of the county exactly as apportioned by the Superintendent of Public Instruction.

6431. During the next two fiscal years after the fiscal year in which such apportionment is advanced to the school district under Section 6428, the State Controller shall deduct from apportionments made to each such school district from the State School Fund an amount equal to the amount apportioned to such district under Section 6428 and pay the same into the State General Fund.

6432. The State Board of Education shall adopt rules and regulations which:

(a) Prescribe the procedures, consistent with this article, by which a district shall identify pupils as mentally gifted minors for the purposes of this article.

(b) Establish minimum standards for programs.

6433. The Superintendent of Public Instruction shall adopt rules and regulations which for the purposes of this article:

(a) Define "excess expense."

(b) Prescribe the form and manner of application for an advance apportionment.

(c) Prescribe the form and manner of application for reimbursement of excess expense.

6434. The State Board of Education shall establish in the Department of Education a supervision and consultant service to assist and advise school districts in the establishment, development, and improvement of programs, and shall employ the necessary personnel who shall devote their entire time to the provision of such service.

SEC. 2. There is hereby appropriated out of the General Fund the sum of thirty thousand dollars (\$30,000) to the Department of Education in augmentation of Item — of the Budget Act of 1961.

SEC. 3. Section 1 of this act, except Education Code Sections 6432, 6433, and 6434, shall become operative on July 1, 1961.

SEC. 4. This act is an urgency measure necessary for the immediate preservation of the public peace, health or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting such necessity are:

Excess cost apportionments authorized by this act to school districts are based upon participation by pupils for a school year or school semester. In order that programs conducted under this act during the school year 1961-1962 may be reimbursed for students participating in a special education program for mentally gifted minors during the entire 1961-1962 school term, it is essential that this act become effective immediately.

Hawaii

Act 147 of the Regular Session of the Legislature, 1957, specifically set up State leadership for the Program for the Gifted by designating appropriations out of the general revenues under Special Education for the biennial period ending June 30, 1959. The funds provided for four teachers for gifted children off-ratio and a director of gifted children.*

Act 18 of the Regular and Special Sessions of 1960, an act making appropriations out of the general revenues under Special Education for the fiscal year ending June 30, 1961, provided for 10 additional teachers for the gifted program.*

Illinois

The Special Study Project for Gifted Children was established by the 71st General Assembly with House Bills 57 and 58. The project was specifically designated to serve those defined by the General Assembly as "children between the ages of five and twenty-one years whose mental development as determined by individual examination is accelerated beyond the average to the extent that they need and can profit from specifically planned educational services."

The intent of the legislation, as interpreted, is to secure data, information, and recommendations to assist the General Assembly to determine (1) whether permanent legislation to assist districts in providing for gifted children is needed and desired, (2) the nature of such legislation (if desired), (3) whether State funds should be appropriated for implementing such educational programs, (4) a proposed plan for determining and allocating such funds (if desired), and (5) how a statewide plan might be developed of value to districts of various sizes with flexibility to meet different educational and socioeconomic patterns.

House Bill 58, approved July 14, 1959, reads as follows:

Section 12-20.1. The school board of any school district, which provides special education facilities for gifted children as defined in Section 12-20, paragraph 7, may operate a study project for such children, until June 30, 1961, subject to the limitations herein provided, and may receive therefor State reimbursements hereinafter specified.

Such projects shall be conducted under rules and regulations prescribed by the Superintendent of Public Instruction.

Application for reimbursement must first be submitted through the office of the County Superintendent of Schools to the Superintendent of Public Instruction. The application shall set forth a plan for the project to be established and maintained in accordance with the applicable requirements under this article. If such applications are approved and such project thereafter conducted under regulations of the Superintendent of Public Instruction, claims for reimbursement shall be made as follows:

On vouchers prescribed by the Superintendent of Public Instruction, executed in triplicate, claims for reimbursements to districts, may be submitted for the school year ended on June 30, preceding, in the manner outlined for making claims under Sec. 12-25.

* Paraphrased from *Laws of the Territory of Hawaii*, p. 151-152, 29th Legislature.

* Paraphrased from *Session Laws of Hawaii, First State Legislature*.

The Superintendent of Public Instruction before approving such warrants shall determine whether the project was conducted in accordance with provisions of the approved plan.

The basis of reimbursement shall be at the rate of \$3,000 per year for each full-time qualified psychological examiner or consultant working with such programs for the gifted, and for whom reimbursements are not claimed under Section 12-20.

Upon approval of claims the Superintendent of Public Instruction shall prepare and submit vouchers for their payment to the Auditor of Public Accounts to be paid out of any money in the treasury appropriated for such purpose. If the amount appropriated for such reimbursement is less than the claims approved, the Superintendent of Public Instruction shall reduce the claims proportionately before drawing vouchers in payment thereof.

Prior to December 1, 1960, the Superintendent of Public Instruction shall report to the Governor on the findings of such study projects for gifted children and shall submit such report to the members of the General Assembly at its next regular session.

Section 2. The sum of \$150,000, or so much thereof as may be necessary, is appropriated to the Superintendent of Public Instruction for reimbursements to districts under Section 12-20.1 of "The School Code," approved May 1, 1945, as amended, and for administrative expenses of this amendatory act.

House Bill 929, approved by the Governor on July 31, 1961, reads as follows:

The Superintendent of Public Instruction is authorized to enter into contracts of jointly financed cooperative arrangements with school districts and universities and colleges for the conduct of study projects in the field of education of gifted children as defined in Section 14-1, paragraph 7. The conduct of such projects may not extend beyond June 30, 1963.

Prior to entering into such contracts or jointly financed cooperative arrangements, the Superintendent of Public Instruction shall evaluate proposals as to the soundness of their design, the possibilities of securing productive results, the adequacy of resources to conduct the proposed research, and their relationship to other similar educational research already completed or in process. He may obtain the advice and recommendations of a committee selected by the Superintendent of Public Instruction.

Upon approval of the performance of such contracts the Superintendent of Public Instruction shall prepare and submit vouchers for their payment to the Auditor of Public Accounts to be paid out of any money in the treasury appropriated for such purpose.

Section 2. The sum of \$150,000 or so much thereof as may be necessary, is appropriated to the Superintendent of Public Instruction for payments made pursuant to contracts made between the Superintendent of Public Instruction and school districts, universities and colleges pursuant to Section 14-2 of "The School Code" approved March 18, 1961 and for administrative expenses.

Prior to December 1, 1962 the Superintendent of Public Instruction

shall report to the Governor on the findings of such study projects for gifted children and shall submit such report to the members of the General Assembly at its next regular session.

New York

Since April, 1958, the State Education Department in its budget to the legislature has included the request for funds "... for services and expenses of expanding the programs of testing, guidance, and consultation for the identification and education of the gifted. . . ." Funds which have been provided are as follows:

1958—\$100,000	1961—\$85,000
1959—\$100,000	1962—\$90,665
1960—\$ 85,000	

North Carolina

Senate Bill 383, identical to House Bill 971, established a statewide program for gifted children and a division in the State Department of Education to implement the legislation. The Act to provide for the public school education of exceptionally talented children in North Carolina was approved in June, 1961, and reads as follows:

WHEREAS, there was created by joint resolution of the General Assembly of the State of North Carolina in session in the year 1959, a Commission to Study the Public School Education of Exceptionally Talented Children; and

WHEREAS, this Commission after two years of intensive investigation and study has found the institution of a program for the education of exceptionally talented school children in the public school system of North Carolina to be strongly in the public interest and long overdue; and

WHEREAS, this Commission of the Legislature has made certain basic recommendations for the establishment of a statewide program for the exceptionally talented children; and this Act is necessary to implement that report and to establish a program under which all the exceptionally talented children of North Carolina shall have an opportunity fully to develop their talents and burgeon out the best that is within them; and

WHEREAS, the establishment of such a program is essential in order that North Carolina and the nation may develop and utilize fully these valuable human resources in this time of local and national challenge and crisis: NOW, THEREFORE, The General Assembly of North Carolina do enact:

Section 1. There is hereby established a program for the education of exceptionally talented children within the public school system of North Carolina which shall be state-wide in operation and opportunity.

Section 2. As used in this Act,

(1) The term "*Exceptionally Talented Child*" means a pupil in

the public school system of North Carolina who possesses the following qualifications:

- (a) A group intelligence quotient of 120 or higher,
- (b) A majority of marks of A and B,
- (c) Emotional adjustment that is average or better,
- (d) Achievements at least two grades above the state norm, or in the upper 10% of local norms of the administrative unit, and
- (e) Shall be recommended by the pupil's teacher or principal.

The State Board is authorized to change the foregoing criteria for qualifications as an exceptionally talented child, if deemed necessary, provided the qualifications shall be uniform in application.

(2) The term "*Director*" means the Director of the Division for the Education of Exceptionally Talented Children within the public school system.

(3) The term "*State Board*" means the State Board of Education.

(4) The term "*State Superintendent*" means the State Superintendent of Public Instruction.

Section 3. There is created within the State Department of Public Instruction a division to be known as the Division for the Education of Exceptionally Talented Children.

Section 4. The Division for the Education of Exceptionally Talented Children within the public school system shall be administered by a Director under the general supervision of the State Superintendent. The Director shall be appointed by the State Superintendent subject to the approval of the State Board. The salary of the Director shall be determined by the State Personnel Council upon recommendation of the State Board and shall be adequate to obtain a person highly trained and qualified by reason of education and experience. The State Board is authorized to provide the Director with such assistance, clerical help, and travel allowances as it may determine to be necessary to carry out the responsibilities of the office of Director under this Act.

Section 5. The Director shall recommend and the State Superintendent appoint, with the approval of the State Board, a supervisor for testing and pupil classification who shall, in cooperation with existing testing and pupil classification services of the Department of Public Instruction, be charged with the responsibility of testing and evaluating all children in the public school system for the purpose of identifying the exceptionally talented children. Said supervisor shall be a person well trained and professionally qualified to carry out this responsibility. In addition, the Director shall recommend and the State Superintendent appoint with the approval of the State Board, such specialists as may be necessary for adequate counseling and identification of such exceptionally talented school children throughout the State; and the State Board shall provide necessary funds for office expense and travel for the conduct of their work.

Section 6. In each of the eight educational districts into which the State is divided by the General Assembly pursuant to Article IX, Section 8 of the Constitution of North Carolina, appropriate programs of education for exceptionally talented children shall be established and developed by a district supervisor of education of the exceptionally talented children in the district. The district supervisors shall be recommended by the Director and appointed by the State Superintendent with the approval of the State Board and shall be well trained, professional personnel. The district supervisors shall be provided funds for office expense and travel allowances. Their duties shall include assistance of local administrative units in planning programs and developing curricula for the exceptionally talented pupils.

Section 7. The Director, under the direction of the State Board and in accordance with the rules and regulations prescribed by it, is authorized to perform such other powers and duties as the State Board may prescribe for the implementation of the purposes of this Act, including the following:

(1) Research studies which will develop techniques, curricula, and materials especially applicable to exceptionally talented children;

(2) Recommendation of special books, materials, and other supplies to be purchased by the State board for the proper implementation of this Act, including the local programs provided in Section 8;

(3) Direction of the district supervisors provided for in Section 6 in the development of proper curriculum and studies to fit the individual needs of exceptionally talented children within the district of the supervisor and of the local administrative units within such districts; and

(4) Establishment of standards for the teachers of the exceptionally talented to be employed or paid in whole or in part pursuant to the provisions of this Act and to give such examinations or tests as may be necessary to determine such qualifications.

Section 8. The Superintendent of any school administrative unit may submit to the Director a proposal, including any program already in operation, for a local program for the education of the exceptionally talented children in that administrative unit. If such proposal is approved by the Director, in accordance with rules and regulations to be prescribed by the State Board, for qualification of local programs under this Act, there shall be allocated by the State Board out of the Nine Months' School Fund, to the school administrative unit such funds as may be necessary to carry out the program. Such programs may include additional teachers, special materials and books, plans for identifying and guiding exceptionally talented students, or other items of excess cost not properly borne by the local unit, provided that the amount allocated shall not exceed a maximum amount for each participant pupil to be fixed by the State Board. Teachers for such approved local programs may be allotted out of the teachers provided for the Nine Months' School Fund, provided such

allotment may be in addition to the regular teacher allotment to the administrative unit involved. Two or more administrative units may join together for the purpose of operating such a program, under the direction of the Division for the Education of Exceptionally Talented Children.

Section 9. Demonstrative programs for the education of exceptionally talented children in five pilot centers throughout the state shall be continued under the supervision of the Director for the school year 1961-1962, the excess expense of such pilot centers over and above local expenditure to be borne by the state out of the appropriation provided in this Act. The Director shall recommend rules and regulations subject to approval of the State Board, for the reimbursement of such excess expense. Subsequent to the school year 1961-1962, the Director shall, with the approval of the State Board, determine whether pilot centers shall continue to be operated, and if so, the number, location, and manner of operation thereof; provided that these pilot centers shall be representative of the various conditions and geographic areas throughout the state.

Section 10. There is hereby appropriated to the Nine Months' School Fund for the fiscal year 1961-1962 the sum of one hundred fifty thousand dollars (\$150,000.00) and for the fiscal year 1962-1963 the sum of one hundred fifty thousand dollars (\$150,000.00) for the implementation of the program for the education of exceptionally talented children in the public school system provided by this Act. The State Board shall transfer from this appropriation to the Department of Public Instruction the amounts the State Board deems to be required for the functions provided in Sections 3, 4, 5, 6 and 7 of this Act. The remainder of this appropriation shall be used for the allocations for approved local programs provided in Section 8 of this Act, and the allocations to the pilot centers, provided in Section 9 of this Act; provided that said allocations shall be over and above amounts which are available for implementation of these local programs and pilot centers from the regular allotments made from the Nine Months' School Fund to administrative units.

Section 11. Nothing in this Act shall prohibit or interfere with the operation in a local school administrative unit of any program for exceptionally talented children not qualifying for the State funds provided in Section 8 of this Act, but which is financed out of local funds.

Section 12. All laws and clauses of laws in conflict with this Act are hereby repealed.

Section 13. This Act shall become effective on and after July 1, 1961.

Ohio

On August 1, 1959, the 103d Legislature enacted House Bill 754 which reads as follows:

For the purpose of encouraging the development of special programs of education for academically gifted children the state board

of education shall employ competent persons to analyze and publish data, promote research, advise and counsel with boards of education, and encourage the training of teachers in the special instruction of gifted children. The state board of education may provide financial assistance out of any funds appropriated for this purpose to boards of education for developing and conducting experimental programs of education for academically gifted children.

In order to carry out the purposes of the bill, the sum of \$250,000 was appropriated for a 2-year period. The 104th Legislature renewed the appropriation for another biennium.

Oregon

The 47th Legislative Assembly in 1953 authorized a 2-year pilot study for an "experiment in administration of a reimbursable special education program for gifted elementary school pupils." The sum of \$25,000 was appropriated for the purpose.

The 49th Legislative Assembly in 1957 provided \$25,000 annually on a continuing basis to be used by school districts to finance "special instructional facilities for the educationally advanced." This has been interpreted by the State Department of Education as a pilot program for the top 1 to 2 percent.

The 50th Legislative Assembly in 1959, Chapter 528 of House Bill 623, provided funds for the "educationally able and gifted children." The State Department of Education has interpreted this to apply to the top 15 to 20 percent of the State's students. Chapter 528 of House Bill 623 reads as follows:

Be It Enacted by the People of the State of Oregon:

Section 1. The purpose of this Act is to stimulate and assist school districts to improve the instruction or curriculum for educationally able and gifted children enrolled in their schools. This Act is in addition to and does not repeal ORS 343.315 to 343.385.

Section 2. As used in this Act, unless the context requires otherwise:

(1) "Educationally able and gifted children" means those children enrolled in a public school who individually meet the criteria for such children as determined by the State Board of Education according to generally accepted standards.

(2) "Plan" means a written plan to improve the instruction or curriculum for educationally able or gifted children.

Section 3. Section 4 of this Act is added to and made a part of ORS 327.006 to 327.150

Section 4. At the beginning of each fiscal year, the State Treasurer shall place \$250,000 of the Basic School Support Fund in a special account to be known as the Educationally Able and Gifted Children Account, and the moneys so placed in such special account hereby are appropriated for and may be used to carry out the provisions of this Act. Any unexpended unobligated funds remaining in the account established under this section shall, at the end of the fiscal year next following the year in which the surplus was estab-

lished, be added to the amount of the Basic School Support Fund to be apportioned the following year.

Section 5. Any school district may submit a written plan for the improvement of instruction or curriculum for educationally able and gifted children enrolled in its schools.

Section 6. The Superintendent of Public Instruction shall receive plans submitted under section 5 of this Act and may annually establish a date after which no further plans may be submitted for reimbursement under this Act. The Superintendent of Public Instruction shall determine which plans will be approved and receive reimbursement under this Act. In determining which plans will be approved, the Superintendent of Public Instruction shall consider:

- (1) The adequacy and type of program proposed.
- (2) The number of children who will benefit by the proposed program.
- (3) The availability of personnel and facilities in the school district or districts.
- (4) The need for such a program in the district or districts.
- (5) Whether the plan meets the requirements of this Act.
- (6) Any other factors which will help to accomplish the purpose of this Act.

Section 7. No plan shall be approved under section 6 of this Act unless the district or districts submitting the plan agree to expend for improvement of instruction or curriculum for educationally able and gifted children, out of district funds, an amount equal to a grant by the state to the district or districts under this Act. In determining the amount expended by a district under this section, expenditures during that year for programs initiated prior to the effective date of this Act for the improvement of instruction or curriculum for educationally able and gifted children shall be counted as part of the district's required expenditure.

Section 8. Any school district which has expended money under an approved plan shall report to the Superintendent of Public Instruction at the end of each fiscal year the amount expended pursuant to the plan during that fiscal year. The Superintendent of Public Instruction shall review the reports and shall reimburse each district operating under an approved plan in an amount not exceeding \$1.50 per child in average daily membership in the schools of that district for the fiscal year ending June 30 prior to the school year for which the plan was approved and in effect. Average daily membership shall be determined as provided in ORS 327.006. The Superintendent of Public Instruction may make advances to school districts prior to the end of the fiscal year. In the event that funds available for reimbursement of school districts under this Act are insufficient to pay the full reimbursable amount of all approved claims in any one year, the reimbursement to each district shall be prorated according to the ratio that the total amount of funds available bears to the total amount that would be required to pay all approved claims in full under the Act for the fiscal year concerned.

Section 9. As part of a program to increase instructional or curriculum services for educationally able or gifted children, the Superintendent of Public Instruction may approve a plan developed and operated at the state level under the direction of the Department of Education. Expenses of the department under this section for a director of this program and other administrative costs, services, materials, equipment and supplies shall not exceed \$25,000 in any one fiscal year.

Section 10. The State Board of Education shall prescribe rules and regulations to carry out the purposes of this Act.

Section 11. This Act is limited to a three-year period and will expire three years after its effective date.

Section 12. This Act being necessary for the immediate preservation of the public peace, health and safety, an emergency is declared to exist, and this Act shall take effect upon its passage.

In 1961, the 51st Legislative Assembly extended the appropriation and the provisions of Chapter 528 of House Bill 623 for one year. At the end of this time the program effectiveness will be evaluated to determine the need and nature of any additional appropriation or change of program direction.

Pennsylvania

In 1961, the General Assembly enacted Section 8, Article XIII of Act 546, which appropriated funds for programs relating to gifted children. The section, however, was vetoed by the Governor on September 12, 1961, because no provision had been made for the item in the budget. The section read as follows:

Section 8. The sum of one hundred thousand dollars (\$100,000), or as much thereof as may be necessary, is hereby specifically appropriated to the Department of Public Instruction for the fiscal period ending June 30, 1962, for the purpose of making payments to school districts and county boards of school directors on account of special education of exceptional children as provided in section 2509 of the Public School Code of 1949 and for payments in accordance with the provisions of subsection (5) of section 1372 of the Public School Code of 1949: Provided, however, that not more than seventy-five thousand dollars (\$75,000) shall be expended for programs relating to socially or emotionally disturbed children and not more than twenty-five thousand dollars (\$25,000) shall be expended for programs relating to gifted children.

Washington

In February, 1961, Chapter 116, Laws of 1961, was enacted, which established a division of special education for students of superior capacity in the Office of the State Superintendent of Public Instruction. In April, 1961, a \$50,000 appropriation was assigned by the State Legislature to implement the provisions of this bill.

Interim Appointments

Pending completion of reports from study commissions and/or the permanent appointment of a director, interim appointments of State directors of programs for gifted pupils were made in five States: California, Illinois, New York, Texas, and Washington. Three of these appointed were titled coordinators, and two were named consultants. Illinois appointed a research consultant in addition to the coordinator.

The functions of the interim appointee have varied according to the status of the State program at the time of his appointment. California, New York, and Texas appointees have listed as part of their duties the preparation of reading materials for various groups commissioned to study programs for gifted and talented students. In California, the consultant met with the State Department of Education to develop policy regarding the program for mentally gifted minors. All six appointees surveyed existing programs within their States and coordinated and promoted them through workshops, inservice training, pilot programs, and research seminars. In California, the consultant coordinated these local programs with the programs in higher education and discussed with the colleges possibilities of providing special educational opportunities for teachers of gifted children. Appointees in California and Illinois have had the tasks of interpreting legislation to local school districts and of administering rules and regulations

Table 2.—Interim positions and dates of service in five States

State	Title of position	Dates of service
California.....	Consultant in the Education of the Mentally Gifted.	January 15, 1962–June 30, 1962.
Illinois.....	Coordinator of the Special Study Project for Gifted Children.	September 1959–June 1963.
	Research Consultant for the Special Study Project for Gifted Children.	August 1960–June 1963.
New York.....	Coordinator for the Education of the Gifted.	1954–1956; 1958–1959; January 1960–September 1960.
Texas.....	Consultant for the Education of the Gifted and Talented.	January 1962 . . . continuing.
Washington.....	Coordinator of Programs for Gifted Children.	1961 . . . continuing to August 1, 1963, pending further legislation.

for payments and reimbursements. In general, the interim appointee employs clerical and technical personnel and supervises the project as a whole. Dates and titles of the interim positions in five States are given in table 2.

Role of Agencies Other Than State Departments of Education

In nine of the States represented at the conference, agencies other than the State department of education have had a significant influence upon the evolution of the position of the State department of education director of programs for the gifted. They have served as a means of communication between professional organizations and lay groups. In some instances data, personnel, or assistance in securing needed legislation have been obtained with the aid of these agencies. Specific examples of such participation by agencies and associations are the following:

California

The California Congress of Parents and Teachers, the American Association of University Women, and the California School Boards Association were represented on the State Advisory Committee concerned with the 3-year study. These and other organizations played a key part in urging the passage of legislation.

Hawaii

The Territorial Advisory Committee on the Education of Gifted Children, formed in 1953, included school officials, members from the University of Hawaii, and the Hawaii PTA. The committee cooperated with the Territorial Commission on Children and Youth and with the Academy of Arts in developing classes for talented secondary school students.

Illinois

A number of school systems and universities are directly involved with the Special Study Project through membership of administrators and faculty members on the State Advisory Committee. A close informal working relationship has been maintained with the Illinois Council for Exceptional Children and the Illinois Association for Supervision and Curriculum Development. The Illinois Association of School Administrators participated in a series of 1-day conferences for administrators in the spring of 1962.

The University of Illinois cooperates with the Office of the Superintendent of Public Instruction by providing office space and the use of many university services and facilities; the headquarters of the Special Study Project for Gifted Children is located at the University of Illinois.

Members of the faculties of several universities have served as consultants to the Special Study Project, including the University of Illinois, Southern Illinois University, and the University of Chicago.

Minnesota

The Minnesota Advisory Board on Exceptional Children assisted the State Department of Education by serving in a consultive capacity to the subcommittee on the gifted; by preparing a statement on the philosophical basis for the education of the gifted, which was distributed concurrently with one prepared by the subcommittee members; and by providing information and funds to get survey material prepared, printed, and distributed.

The Minnesota Council for the Gifted, Inc., a statewide group concerned with expanding facilities and provisions for the gifted, aided the Department by coordinating services for the gifted; by including Department personnel on the Council's Board of Directors, thus increasing the Department's sphere of influence; and by providing the use of clerical services, materials, and facilities.

New York

The New York State Teachers Association has worked closely with the State department of education since 1954 in developing surveys and practices of education for the gifted.

North Carolina

In setting up the program, the State Department of Public Instruction's Commission to Study the Public School Education of Exceptionally Talented Children had the cooperation of the College Entrance Examination Board, North Carolina Congress of Parents and Teachers, radio and television stations, newspapers, colleges, the Grange, North Carolina Education Association and its subdivisions, State Board of Education, representatives of business and industry, and the State Curriculum Study Committee.

Pennsylvania

Recommendations to the State Superintendent concerning the need for the position of State director of programs for the gifted were made by the Pennsylvania Association for the Study and Education of the Mentally Gifted. The Governor's Committee on Education also expressed the need for such service.

Puerto Rico

The Department of Education works in cooperation with the following institutions of higher learning in the development of programs for the gifted: University of Puerto Rico, College of Agriculture and Mechanical Arts, Catholic University, and Inter American University.

The Department of Education, in cooperation with the University of Puerto Rico, has organized seminars, workshops, and summer courses for teachers on the education of the gifted.

Texas

The Texas Education Agency and the University of Texas co-sponsored the Texas Superior and Talented Student Project of the Southern

Association of Secondary Schools and Colleges. The University assisted in planning the 1961 Summer Workshop and the Fall Conference for schools participating in the Superior and Talented Student Project.

Location of the Position Within the State Department of Education

Within State departments of education, the position of State director may be located in one of several divisions, depending on the philosophy of giftedness accepted by that State. Whereas one State may call only 0.5 percent of the school population gifted, another department may cite 20 percent as gifted. In the former case, the students may be considered "exceptional", and the director of such students' programs may find his position under special education. In the latter case, the students may not be considered exceptionally unusual, and this director may be assigned to the area of general education. Those departments which see giftedness as a source of unique personality mechanisms may assign the director to the guidance division. Still other departments feel that the attention to subject matter and intellect should precede

Table 3.—Location within the participating State departments of education of the position of the full-time director of programs for the gifted.

State	Location or line of responsibility
California.....	Two full time directors; one within the Bureau of Elementary Education and one within the Bureau of Secondary Education.
Georgia.....	Within the Unit of Services for Exceptional Children which is located within the Division of Instruction.
Hawaii.....	Within the Division of Elementary and Secondary Education.
Illinois.....	Responsible directly to the First Assistant Superintendent of Public Instruction.
Minnesota.....	Responsible directly to the Assistant Commissioner of Education in Charge of Instruction.
New York.....	Responsible directly to the Assistant Commissioner for Instructional Services.
North Carolina.....	Within the Division of Instructional Services.
Ohio.....	Within the Division of Special Education.
Oregon.....	Responsible to the Assistant Superintendent in Charge of Special Education . . . program is separate from Special Education programs but is placed in this division for administrative purposes.
Pennsylvania.....	Within the Bureau of Curriculum Development which is under the Deputy Superintendent for Instruction.
Puerto Rico.....	Within the Divisions of Elementary and Secondary Education.
Texas.....	Within the Division of Guidance and Supervision.
Washington.....	Within the Division of Curriculum.

attention to method and personality; here the director may find himself in the division devoted to curriculum.

Whatever his place in the organizational structure, the director of programs for gifted pupils should have a position that will permit him freedom of operation and that will insure articulation with other areas. It is important that he maintain a high degree of cooperation with those responsible for curriculum development and instruction in elementary, secondary, and higher education; with special education personnel; with specialists in research, guidance services, teacher education, and others.

The location of the position of the directors of programs for the gifted within the State departments of education of conference participants is shown in table 3.

In summary, the position of full-time State department of education director of programs for the gifted was located in the area of instruction in eight of the participating States (California, Hawaii, Illinois, Minnesota, New York, North Carolina, Pennsylvania, Washington); in special education in three (Georgia, Ohio, Oregon); in guidance in one (Texas); and in the divisions of elementary and secondary education in Puerto Rico.

Current Responsibilities of the Director

The role of the State director of programs for the gifted is a fluid one. The directorship has so recently developed, and the directors are so newly appointed that they have an unusual opportunity to initiate action and to define their own roles. Generally they have no predecessors to follow, no established programs to maintain. The kind of leadership they exert and the services they render will change as the program develops. Their basic on-going responsibilities should also become clearer in time.

The State directors who attended the conference reported that they have certain areas of responsibility in common: consultation, administration, curriculum, research, pilot programs, inservice training, legislation, public information, conferences, publications, fiscal management, and equipment and facilities. Specific responsibilities in these areas include the following:

Consultation

Each of the directors—

Offers consultive services to school counselors, teachers, and administrators and to organizations interested in developing special programs for gifted and talented students.

Cultivates lay and professional awareness, understanding, and supportive action related to the educational needs of gifted children and youth.

Helps districts in planning inservice education activities for teachers.

In addition, one or more of the directors—

Provide consultive services in the development of curriculum materials for gifted and talented pupils. (California, Hawaii, New York)

Review individual program plans submitted by local schools and suggest refinements and improvements when needed. (Georgia, North Carolina, Texas)

Advise, through the regional staff and local administrative units, on appropriate programs for the gifted. (North Carolina)

Coordinate details of the work of the department on instruction with field committees. (Pennsylvania)

Coordinate the program with those of other program specialists and divisions within the State department of education. (Hawaii, Minnesota, North Carolina, Puerto Rico)

Meet with county and district personnel to help them interpret legislation, rules, and regulations. (California, North Carolina)

Assist administrative officers in the selection and placement of program assistants and qualified teachers. (Hawaii)

Provide technical guidance to program assistants and teachers assigned to the program for the gifted. (Hawaii, Puerto Rico)

Coordinate the work of a statewide committee on the gifted and of a State department of education committee on the gifted. (Georgia)

Develop plans that will assist local schools to utilize community resources effectively in working with the gifted and talented. (Minnesota, Texas)

Give leadership to the development of programs designed to identify gifted children who are not achieving up to their potential and to the development of techniques for eliminating causes of underachievement. (Texas)

Work with colleges and universities in the State to bring about better coordination between the high schools and the colleges. (Georgia, Minnesota, North Carolina, Puerto Rico)

Advise local school systems conducting experimental programs, in the wise utilization of project funds. (Georgia)

Consult with parents regarding their gifted children. (Minnesota)

Provide financial aid for consultant services to local districts or areas. (Washington)

Suggest bibliographic materials. (California, Georgia, Minnesota, Puerto Rico)

Administration

Each of the directors--

Takes leadership in establishing objectives, developing long-range plans, and maintaining program standards.

In addition, one or more of the directors--

Select and supervise staff. (California, North Carolina)

Participate in the formulation of curriculum policy and related policy affecting school buildings, instructional services, and teacher certification. (Pennsylvania)

Direct and coordinate the review of departmental guides and bulletins. (North Carolina, Pennsylvania)

Review program applications for conformity to rules and regulations of the department and for acceptability in light of sound educational practice, current research, and local district conditions. (North Carolina, Oregon)

Have responsibility for development, coordination, and supervision of special programs for the identification and education of the gifted. (Hawaii, New York, North Carolina, Puerto Rico)

Determine the adequacy and effectiveness of local programs of instruction. (Georgia, Minnesota, North Carolina, Pennsylvania, Puerto Rico)

Administer pilot or experimental programs in the education of gifted children. (Georgia, North Carolina)

Formulate and implement a sound program of identification of giftedness at all levels of instruction. (Hawaii)

Administer research projects supported by the program. (Ohio)

Evaluate undergraduate and graduate programs of teacher education. (Pennsylvania)

Exercise general supervision of all teachers assigned to work with the program. (Hawaii, North Carolina, Puerto Rico)

Administer group tests. (Puerto Rico)

Curriculum

Each of the directors--

Recommends general curriculum revisions which provide a frame of reference within which local schools can assume the initiative.

Assists in the development of curriculum revision of specific subject or grade areas in cooperation with other personnel in the department.

In addition, one or more of the directors--

Participate in the revision of curriculum, K to 16, in keeping with the philosophy that the development of threads of learning through continuums of studies should be so organized and related that there shall

be coordinated and effective education with a minimum of duplication or repetition of material. (Pennsylvania)

Encourage curriculum revision by emphasis on specific educational programs and by the requirement that districts develop a written plan for their programs to be available for public inspection. The written plan is one of the minimum standards necessary to be met before districts may claim excess-cost reimbursement for identifying and conducting a program for mentally gifted minors. (California)

Encourage districts to carry on at least a one-year curriculum study before implementing a program and offer reimbursement to the district in connection with this study for such items as teacher training, extended contracts for directors and planning committee members, professional reference materials, consultants, interschool visitation costs, substitute teacher costs, materials and equipment for limited experimentation, office costs, and incidentals. (Oregon)

Provide consultive services in the development of curriculum materials appropriate to the needs of the gifted and talented pupils in the elementary, secondary, and college levels. (California, Hawaii, New York)

Research

Each of the directors—

Keeps informed of significant pertinent research being conducted at local, State, and national levels.

Gathers and disseminates information about research.

Promotes research studies, pilot projects, and surveys which can contribute valuable evaluative data for schools and communities.

In addition, one or more of the directors—

Identify areas of needed research. (Pennsylvania)

Prepare information to keep educators and the public aware of new developments in the field of the gifted child. (Minnesota, Oregon)

Cooperate with Bureau of Research in the State Department of Public Instruction. (Pennsylvania)

Cooperate with individuals and organizations engaged in research and in the education of gifted children. (Georgia, Minnesota)

Aid in the development of research design. (Pennsylvania)

Facilitate and coordinate research activities. (California)

Develop criteria and procedures for evaluating the program, conduct an evaluation of all phases of the work regularly, and recommend improvements in accordance with results of evaluations. (Hawaii, New York)

Evaluate pilot or experimental programs in the education of gifted children by research techniques. (Georgia)

Encourage districts to use and to develop appropriate research techniques in evaluating programs for mentally gifted minors. (California)

Encourage and give financial assistance to acceptable research related to improved instruction for the gifted. (New York, Washington)

Assist personnel in study projects in local districts on problems of research design and research procedures, including statistical analysis and data processing and direct studies of the education of gifted children in which local school districts serve as cooperating agencies. (Illinois)

Coordinate and administer research projects supported by the program. (Ohio)

Pilot Programs

Each of the directors—

Encourages the development of pilot programs and provides selected services to school districts interested in developing such programs.

Other functions of directors in particular States are to—

Consider most district programs as pilot programs and offer financial aid to districts new to the program to study outstanding programs. In Oregon original pilot programs, financed by an appropriation of \$25,000, were reduced to two during the year 1961-62 and will be discontinued or financed through the larger matching program (\$250,000) during 1962-63. The original amount of \$25,000 will then be available for unique experiments in new districts.

Supervise demonstration programs in five pilot centers throughout the State; recommend rules and regulations, subject to approval of the State Board, for the reimbursement of excess expense; determine, with approval of the State Board, whether pilot centers shall continue to be operated and, if so, the number, location, and manner of operation thereof. (North Carolina)

Supervise 10 experimental projects located in 10 different school systems with financial support of \$4,000 a year to each system for 3 years. (Georgia)

Initiate pilot programs, such as a program for gifted ninth-grade students which was supported in six high schools during 1961-62. (Puerto Rico)

Support 10 demonstration projects. (Ohio)

Sponsor specific experimentation in cooperation with other organizations. (Hawaii, Minnesota)

Encourage experimentation and formal evaluation of such experimentation as acceleration, ability grouping, and early entrance into school. (Minnesota)

Serve as consultant to the directors of pilot programs which are under the auspices of individual universities and work cooperatively with the Office of Coordinator of Curriculum Research and Development Projects. (Pennsylvania)

Coordinate the State Special Study Project for Gifted Children. (Illinois)

Inservice Training

Each of the directors—

Gives leadership in the development and implementation of inservice training programs in talent development.

In addition, one or more of the directors—

Organize and supervise inservice training programs. (Georgia, Hawaii, Pennsylvania, Puerto Rico)

Coordinate program with the university teacher-training program and with other appropriate government agencies. (Hawaii)

Encourage local area inservice training by offering to assist in scheduling and financing consultants and by furnishing list of available consultants. (Washington)

Work with colleges and universities in planning courses for teachers related to the instruction of gifted children. (California, Georgia, Oregon, Puerto Rico)

Work with college personnel in developing summer "clinic" or "workshop" opportunities to focus on examining the cumulative records of gifted children and on planning educational opportunities in light of the needs of individuals. (California)

Legislation

Each of the directors—

Drafts recommendations which may be used as a basis for improving current legislation or for initiating needed legislation.

In addition, one or more of the directors—

Prepare program descriptions, research data, justifications, projected plans, and other information as requested by the legislature. (Hawaii)

Participate in legislative hearings pertaining to programs for the gifted. (Hawaii)

Work with the State department of education personnel in planning statewide programs for the education of gifted children and the development of legislation if needed to carry out the program. (Georgia)

Meet with the legal adviser and discuss questions that may need to be referred to the attorney general. (California)

Meet with advisory committee on matters of program administration, procedures, and need for new legislative emphasis and direction. (Illinois, Oregon)

Meet with county and district personnel and help them interpret legislation in the area of the gifted. (California)

Public Information**Each of the directors—**

Contributes to public information by means of correspondence, bulletins, and talks before groups and by acting as a resource person.

In addition, one or more of the directors—

Arrange newspaper releases, appear on radio and television programs, speak at professional and lay group meetings.

Assist with inservice workshops. Descriptions of unique and successful programs are prepared in various districts. (Minnesota, Oregon)

Assist in the public relations office of the department of education in keeping the public informed on activities in relation to the gifted. (Puerto Rico)

Coordinate with the information specialist on news releases. (Hawaii)

Recommend special books, materials, and other supplies to be financed by the State Board for proper implementation of programs. (North Carolina)

Maintain or assist in maintaining, with the department of education, a lending library of professional reference material. (Georgia, Minnesota, Oregon)

Act as a member of the Department Committee on Public and Professional Information. (Pennsylvania)

Conferences**Each of the directors—**

Provides leadership in conferences and workshops.

Works cooperatively with State and national organizations interested in the improvement of education opportunities for gifted and talented students.

Attends conferences on national, State, and local levels in order to keep abreast of the latest developments in the education of the gifted as well as to disseminate information to the field.

Serves in the capacity of speaker, panel member, or resource person.

In addition, one or more of the directors—

Direct workshops; serve as speakers at teacher institutes; plan workshop and conference programs; and participate in department, State, and national conferences. (Georgia, Pennsylvania, Washington)

Disseminate and interpret information regarding concepts, effective practices, and research findings in education of the gifted by means of conferences with community people, legislators, parents, agencies, university staffs, and faculty and student groups. (Georgia, Hawaii, Minnesota)

Publications

Each of the directors—

Prepares and distributes a variety of reports and informational materials for use by schools, department staff, and the public.

Assists in fulfilling the purposes for State publications, which are (1) to stimulate interest and give general information to the lay public, (2) to promote professional thinking among administrators or supervisors, (3) to describe experiments, activities, or programs to school personnel, (4) to disseminate the results of surveys or research studies, and (5) to promote a special framework such as advanced placement.

In addition, one or more of the directors—

Review department publications along with other directors to assure harmony of thought and policy as represented by the State department of education. (Pennsylvania)

Fiscal Management

Each of the directors—

Participates in developing budget requests for the program for the gifted.

In addition, one or more of the directors—

Administer and account for available financial aid. (Hawaii, North Carolina, Oregon, Washington)

Interpret rules and regulations governing excess cost reimbursement. (California)

Collect and interpret data which will describe what expenditures are being made. (California)

Prepare a report which may be used by the State Legislature in evaluating fiscal aspects of the State-supported gifted child program. (California)

Provide financial aid for consultive services to local districts or areas. (Washington)

Equipment and Facilities

Each of the directors—

Encourages the acquisition of improved equipment and facilities and recommends better usage for supplies on hand.

In addition, one or more of the directors—

Recommend building facilities or features which lend themselves to provisions for the gifted, and prepare basic lists of equipment, types of books, and supplies that will be combined with other curriculum areas and compiled into Educational Specifications Guide. (Hawaii)

Encourage from the State level improved science, mathematics, foreign language, library, and advanced placement programs, which result in the widespread purchase and use of language laboratories, audiovisual equipment, and science equipment, such as bioscopes and oscilloscopes, to the extent that such equipment is considered commonplace. (Pennsylvania)

Encourage the improvement of elementary and secondary school libraries and of laboratory facilities for science classes. (Puerto Rico)

Financial Concerns

The most significant long-range support for programs for the gifted must come from local funds. Thus, according to the conferees, one of the most valuable allocations of funds from State sources would be for the establishment of demonstration programs—programs that may take many forms.

Demonstration centers and research study projects are used, for example, to illustrate the value of special programs for gifted and talented youth and to apprise local school staffs of recent findings in the field. Ohio has supported 10 demonstration centers throughout the State. Thirty to 36 such centers are projected in Illinois to illustrate and test 6 approaches to educating gifted children. Minnesota will seek funds from the legislature to develop 10 demonstration centers during the 1963-65 biennium. Georgia is conducting experimental programs in 10 school systems where fund allowances made in December 1960 provide each experimental school \$4,000 per year for a period of 3 years. The State consultant in Georgia assumes the responsibility of advising local schools in the utilization of their funds.

Project studies and research are encouraged by State directors and may be supported by State funds. In Hawaii and Minnesota, where no funds are available for reimbursement for research, the State directors act in a consultive role. In Illinois, which has no general program of reimbursement, funds are available to school districts, colleges, and universities, whose submitted reports are reviewed by the State Advisory Committee and the coordinator of the State project on the gifted and approved by the Superintendent of Public Instruction. State funds for research are also available in Georgia, New York, North Carolina, Ohio, and Oregon, subject to the approval of the State director. The State of Washington employs a full-time director of research under whose jurisdiction research relating to programs for the gifted is conducted; approval for funds is made by the Assistant Superintendent in charge of curriculum and instruction upon the recommendation of the State Coordinator of Programs for Gifted Children.

When local schools establish programs, they may find expenses beyond the reach of their budgets. New costs can include special equipment and facilities, tests for the identification of gifted students, salaries for professional psychologists to administer individual tests, and salaries for additional staff members. Some States make provisions to reimburse local schools for their excess expenses either through special allotments per child in the program or through salaries to teachers.

California computes its financial support as \$40 times 2 percent of the units of average daily attendance of public school pupils on a statewide basis in kindergarten through grade 12. It should be noted that in California the Bureau of Apportionments and Reports, relying upon the approval of the consultants, makes decisions for approving expenditures. If a student is not in an approved program, it is not possible for a local school district to collect excess cost reimbursement on the basis of this student. In Oregon, reimbursement is available on a matching basis to the districts in the Educationally Able and Gifted Child Program on the basis of \$1.50 times the average daily membership of the previous year. In Hawaii, funds are allocated for supplies and mileage expenses of additional teachers. The teachers of gifted pupils in Puerto Rico are paid directly from State funds. North Carolina pays full salaries for teachers of the gifted over and above those normally allotted to an administrative unit. In California, Illinois, and Oregon, teachers are not paid directly by State funds; but it is possible for school districts to pay teachers with funds supplied on a matching reimbursement or excess cost basis. The State of Washington has paid direct salaries only to instructors of gifted high school students in pilot summer programs. Teachers receiving such funds are directly responsible to their local administrators, who work closely with the State coordinator to develop and evaluate the program.

The financial concerns of a State director may extend to the allocation of funds beyond those provided by the State. Several States have established organizational patterns to administer such funds. In Oregon, for example, the Department of Education recently accepted responsibility for direction of the advanced placement program, a program supported in its first two years by the Ford Foundation through the office of the University of Oregon. Funds from the Ford Foundation, available for one additional year, will be administered by the State director of programs for the gifted with the assistance of a professional program coordinator.

Future Trends

The directors attending the conference were in general agreement about objectives for the near future. In common they voiced the need to recruit qualified personnel, both for State offices and local districts. Proposals to meet this problem were inservice training programs and a high degree of cooperation between State departments of education and colleges preparing teachers.

The directors recognized a continuing need for liaison work between curriculum departments and psychologists, between State departments and local school districts, and between schools and the public in general. They suggested instituting meetings and conferences at local, regional, and State levels.

Steadily increasing newspaper coverage of such conferences is helping evoke a public sympathy, which can support the State departments as they generate an awareness of their work. In addition, the directors themselves indicated that extensive publications to describe existing provisions for gifted students would be helpful. They pointed out that collecting data for and actively supporting special legislation could further stimulate public interest and help the cause of education for the gifted.

The directors reemphasized the constant need for improved identification procedures, curriculums, and methods of evaluation of programs and for closely articulated programs from elementary school through college.

Several States outlined more specific proposals as immediate objectives of their departments. California, for example, anticipates that a number of local school districts will form adult classes designed to help parents understand and assist their gifted children. Illinois plans to build several demonstration centers throughout the State to show in practice various approaches to this education problem. In Minnesota, the State director plans to assist the Minnesota Council for the Gifted in starting special summer schools and camps.

Using its rural population, North Carolina plans to test various theories concerning itinerant teaching. The State also plans to start a concentrated program for gifted fifth- and sixth-grade children and to develop long-range designs for the further education of these children as they enter later grades.

The Texas Education Agency continues to assist and encourage the nine schools participating in their Superior and Talented Student Project. The Georgia State Department of Education will continue to conduct 10 experimental projects for 2 additional years. At the end of the 1963-64 school year, recommendations for

a State-supported program will be made to the State Board of Education.

Pennsylvania plans to develop criteria by which local districts can evaluate their programs for able pupils. The State also will coordinate the research on gifted pupils that is being done at universities and colleges throughout Pennsylvania.

As the personnel within the State departments of education increase their activities in behalf of the gifted and talented, they reflect the growing concern of all educators. Much is being accomplished; much remains to be done. The search for talent must be strengthened in every area of human endeavor, and effective guidelines must be provided for the nurture of these talents. The massive effort needed for this venture, the conferees maintain, will require the sustained interest of a concerned and informed educational profession and national citizenry. Only then will there be the successful conservation of these precious human resources.

Recommendations of the Conferees

FORMAL RECOMMENDATIONS presented by the conferees at the conclusion of the conference include the following:

It is recommended that the U.S. Office of Education—

1. Utilize its facilities and give its continuing support to the development and maintenance of a high level of interest in and respect for appropriate educational programs for gifted children under a designated State department of education director.
2. Disseminate relevant information and current research findings from psychology, sociology, anthropology, and other disciplines which have immediate application and usefulness to State and local school district directors of programs for the gifted in helping them to establish, conduct, and evaluate appropriate educational experiences for gifted children.
3. Supplement available materials by preparing bulletins and a handbook which will focus on guidance and counseling activities for academically talented, gifted, and highly gifted children.
4. Devise a mechanism whereby the States can share the instruments and procedures which they develop for identifying and nurturing gifted and talented children and youth.
5. Maintain and systematically distribute current directories of State directors of programs for gifted children.
6. Arrange to conduct regional meetings on the education of gifted pupils and an annual meeting for full-time State department of education directors of programs for gifted children.

It is recommended that the chief State school officers—

1. Encourage States to provide full-time State department of education directors of programs for gifted children. One of the functions of such an office should be to stimulate the development and improvement of local educational programs for gifted children.

2. Encourage the establishment of the office of the State director of programs for the gifted as a line and staff position in the total organizational structure in such a manner as to be in position to use the resources of curriculum development and instruction in elementary, secondary, and higher education; of special education; of research; of guidance services; of teacher education; and of other pertinent departmental functions.

Informal recommendations made by the conferees during the conference discussion periods include the following:

1. States should encourage preservice and inservice teacher education concentrating on understanding the nature of giftedness and on high competence in the subject field.
2. States should emphasize flexibility in the placement of pupils in programs for the gifted and talented.
3. Allowance should be made within the State budget for incentive funds to promote local interest and participation in programs for the gifted and talented.
4. States should encourage cooperative involvement from kindergarten through higher education to insure continuity of programs for the gifted.
5. An organization to be known as "The Council of State Department of Education Directors of Programs for Gifted Children" should be established, with the full-time State department of education directors of programs for the gifted, as of 1962, as the charter members.

Appendix A

Conferees

SERVIA T. BARNEY, *General Supervisor of the Gifted Child Program, Puerto Rico.*

LEWIS G. BLOOM, *Coordinator of Programs for Gifted Children, Washington.*

MARGARET O. BYNUM, *Consultant in the Education of the Gifted, Georgia.*

J. DIXON EMSWILER, *Director of the Division for the Education of Exceptionally Talented Children, North Carolina.*

CHARLES P. HAGGERTY, *Director of the Program for Able and Gifted Children, Oregon.*

J. BEATRICE HALL, *Consultant in the Education of Gifted and Talented, Texas.*

DAVID M. JACKSON, *Coordinator for a Special Study Project for Gifted Children, Illinois.*

W. ROBERT KELLEY, *Supervisor of Education for the Gifted, New York.*

BETTIE F. NAKAGAWA, *Program Specialist for the Gifted, Hawaii.*

MARY M. PILCH, *Consultant for the Talented Pupil Programs, Minnesota.*

PAUL D. PLOWMAN, *Consultant in the Education of Mentally Gifted Minors, California.*

MARY R. ROUTH, *Curriculum Planning Specialist for the Gifted, Pennsylvania.*

THOMAS M. STEPHENS, *Specialist for the Education of the Academically Gifted, Ohio.*

Resource Persons

CHARLES E. BISH, *Director, Project on the Academically Talented, National Education Association, Washington, D.C.*

J. NED BRYAN, *Specialist, Education of Gifted and Talented Children and Youth, Chairman, Professional Committee, Talent Development Project, U.S. Office of Education.*

WILLIAM R. CARRIKER, *Research Coordinator in Special Education for Co-operative Research Branch, U.S. Office of Education.*

RALPH C. M. FLYNT, *Associate Commissioner for Educational Research and Development*, U.S. Office of Education.

EDMUND A. FORD, *Specialist for Secondary School Organization and Administration*, U.S. Office of Education.

WINSLOW R. HATCH, *Specialist for Experimental Programs and Director of the Clearinghouse on Studies in Higher Education*, U.S. Office of Education.

GERTRUDE M. LEWIS, *Specialist for Upper Elementary Grades*, U.S. Office of Education.

STERLING M. McMURRIN, *Former Commissioner of Education*, U.S. Office of Education.

ROBERT POPPENDIECK, *Specialist for Teacher Education*, U.S. Office of Education.

VIRGIL S. WARD, *Director, Southern Regional Project for Education of the Gifted, Professor of Education*, University of Virginia, Charlottesville, Va.

Appendix B

Directory of State Department of Education Personnel Directly Concerned with Programs or Provisions for the Gifted: Fall 1962

State and personnel	Professional time assigned to the gifted		
	Full	Part time	Slight or none
ALABAMA			
A. Fred Williamson..... <i>Consultant in Guidance and Counseling</i> <i>State Department of Education</i> Montgomery			X
ALASKA			
Theron F. Borden..... <i>Assistant Commissioner of Education</i> <i>State Department of Education</i> Juneau			X
AMERICAN SAMOA			
M. J. Senter..... <i>Director of Education</i> <i>Department of Education</i> Pago Pago, Tutuila			X
ARIZONA			
Floyd K. Baribeau..... <i>Director, Special Education</i> <i>State Department of Public Instruction</i> Phoenix		X	
ARKANSAS			
Ed McCuiston..... <i>Assistant Commissioner for Instructional</i> <i>Services</i> <i>State Department of Education</i> Little Rock			X
CALIFORNIA			
Paul D. Plowman (1)..... <i>Consultant, Education of the Mentally Gifted</i> <i>Bureau of Secondary Education</i> <i>State Department of Education</i> Sacramento	X		
Joseph P. Rice, Jr. (2)..... <i>Consultant, Education of the Mentally Gifted</i> <i>Bureau of Elementary Education</i> <i>State Department of Education</i> Sacramento	X		

State and personnel	Professional time assigned to the gifted		
	Full	Part time	Slight or none
CANAL ZONE			
James M. Wolf..... <i>Coordinator of Special Education</i> <i>Division of Schools</i> Balboa Heights		X	
COLORADO			
William L. Miller..... <i>Head, Secondary Education</i> <i>State Department of Education</i> Denver 2			X
CONNECTICUT			
Mildred B. Stanton..... <i>Consultant, Special Education</i> <i>State Department of Education</i> Hartford		X	
DELAWARE			
Georgia Lightfoot..... <i>State Supervisor, Special Class Program</i> 1007 Delaware Avenue Wilmington 5		X	
DISTRICT OF COLUMBIA			
Leo Allman..... <i>Assistant to Assistant Superintendent in Charge</i> <i>of Jr. and Sr. High Schools</i> Franklin Building, 13th and K Street, NW. Washington 5		X	
FLORIDA			
Landis M. Stetler..... <i>Consultant, Education for Exceptional Children</i> <i>State Department of Education</i> Tallahassee		X	
GEORGIA			
Margaret Bynum..... <i>Consultant, Education of the Gifted</i> <i>State Department of Education</i> Atlanta	X		
GUAM			
Oscar Musgrave..... <i>Superintendent of Schools</i> <i>Department of Education</i> Agana			X
HAWAII			
Bettie Nakagawa..... <i>Specialist, Program for the Gifted</i> <i>State Department of Education</i> Honolulu 14	X		
IDAHO			
James O. Click..... <i>Director of Curriculum</i> <i>State Department of Education</i> Boise			X

State and personnel	Professional time assigned to the gifted		
	Full	Part time	Slight or none
ILLINOIS David Jackson..... <i>Coordinator, Special Project: Study of Gifted Children</i> 105 University High School University of Illinois Urbana	X		
INDIANA Jean L. Anderson..... <i>Acting Director, Division of Special Education</i> <i>State Department of Public Instruction</i> Indianapolis 4			X
IOWA Drexel Lange..... <i>Director, Division of Special Education</i> <i>State Department of Public Instruction</i> Des Moines 19			X
KANSAS Paul Ackerman..... <i>Director, Programs for Gifted Children</i> <i>State Department of Public Instruction</i> Topeka		X	
KENTUCKY Don C. Bale..... <i>Head of Bureau of Instruction</i> <i>State Department of Education</i> Frankfort			X
LOUISIANA James H. Perry..... <i>Supervisor of Special Education</i> <i>State Department of Education</i> Baton Rouge 4		X	
MAINE Joseph J. Devitt..... <i>Chief, Bureau of Secondary Education and Special Projects</i> <i>State Department of Education</i> Augusta		X	
MARYLAND Geneva E. Flickinger..... <i>Supervisor of Adult Education</i> <i>State Department of Education</i> Baltimore 1			X
MASSACHUSETTS John J. Millano..... <i>Director, Elementary and Secondary Education</i> <i>State Department of Education</i> Boston 16		X	
MICHIGAN Esther Belcher..... <i>Educational Consultant</i> <i>State Department of Public Instruction</i> Lansing 2		X	

State and personnel	Professional time assigned to the gifted		
	Full	Part time	Slight or none
MINNESOTA Mary M. Pilch..... <i>Consultant for the Gifted</i> <i>State Department of Education</i> 658 Cedar Street St. Paul 1	X		
MISSISSIPPI W. R. Burris..... <i>Supervisor of Special Education</i> <i>State Department of Education</i> Jackson 106		X	
MISSOURI Richard Dabney..... <i>Director, Special Education</i> <i>State Department of Education</i> Jefferson City			X
MONTANA Raymond H. Lehrman..... <i>Supervisor, Special Education</i> <i>State Department of Public Instruction</i> Helena		X	
NEBRASKA Leroy Ortgiesen..... <i>Assistant Commissioner</i> <i>Division of Instructional Services</i> <i>State Department of Education</i> Lincoln			X
NEVADA Thomas S. Murdoch, Jr..... <i>Consultant, Special Education</i> <i>State Department of Education</i> Carson City		X	
NEW HAMPSHIRE Ruth B. Craig..... <i>Director of Guidance</i> <i>State Department of Education</i> Concord		X	
NEW JERSEY Anne S. Hoppock..... <i>Director of Elementary Education</i> <i>State Department of Education</i> Trenton 25			X
NEW MEXICO George P. White..... <i>Director, Exceptional Children's Program</i> <i>State Department of Education</i> Santa Fe		X	
NEW YORK W. Robert Kelley..... <i>Supervisor, Education for the Gifted</i> <i>State Education Department</i> Albany	X		

State and personnel	Professional time assigned to the gifted		
	Full	Part time	Slight or none
NORTH CAROLINA J. Dixon Emswiler..... <i>Director, Division for the Education of Exceptionally Talented Children</i> <i>State Department of Public Instruction</i> Raleigh	X		
NORTH DAKOTA Janet M. Smaltz..... <i>Director, Special Education</i> <i>State Department of Public Instruction</i> Bismarck		X	
OHIO Arthur R. Gibson..... <i>Educational Specialist, Gifted Programs</i> <i>State Department of Education</i> Columbus 15	X		
OKLAHOMA Fred R. Lawson..... <i>Director, Guidance and Counseling</i> <i>State Department of Education</i> Oklahoma City			X
OREGON Charles Haggerty..... <i>Director, Able and Gifted Children</i> <i>State Department of Education</i> Salem	X		
PENNSYLVANIA John Sandberg..... <i>Specialist for Able Students</i> <i>State Department of Public Instruction</i> Harrisburg	X		
PUERTO RICO Servia T. Barney..... <i>General Supervisor, Gifted Child Program</i> <i>Department of Education</i> Hato Rey	X		
RHODE ISLAND Edward F. Wilcox..... <i>Associate Commissioner of Education</i> <i>State Department of Education</i> Providence			X
SOUTH CAROLINA Donald C. Pearce..... <i>Supervisor, Special Education</i> <i>State Department of Education</i> Columbia			X
SOUTH DAKOTA Lowell Bell..... <i>Director, Pupil Personnel Services</i> <i>State Department of Public Instruction</i> Pierre			X

State and personnel	Professional time assigned to the gifted		
	Full	Part time	Slight or none
TENNESSEE			
Vernon L. Johnson..... <i>Director, Area of Special Education</i> <i>State Department of Education</i> 133-34 Cordell Hull Building Nashville		X	
TEXAS			
J. Beatrice Hall..... <i>Consultant for the Gifted</i> <i>Texas Education Agency</i> Austin	X		
UTAH			
Afton Forsgren..... <i>Acting Director of Secondary Education</i> <i>State Department of Public Instruction</i> Salt Lake City		X	
VERMONT			
Max W. Barrows..... <i>Director, Division of Instruction</i> <i>State Department of Education</i> Montpelier			X
VIRGINIA			
Grace M. Smith..... <i>Assistant Supervisor of Special Education</i> <i>State Board of Education</i> Richmond 16		X	
VIRGIN ISLANDS			
Jane E. Tuitt..... <i>Assistant Commissioner of Education</i> <i>Department of Education</i> Charlotte Amalie, St. Thomas			X
WASHINGTON			
Lewis G. Bloom..... <i>Coordinator, Programs for Gifted Children</i> <i>Office of State Superintendent of Public Instruction</i> Olympia	X		
WEST VIRGINIA			
Evelyn Murray..... <i>Consultant, Gifted and Able</i> <i>State Department of Education</i> Charleston 5		X	
WISCONSIN			
Robert C. Van Raalte..... <i>Assistant Superintendent</i> <i>State Department of Public Instruction</i> Madison			X
WYOMING			
James G. Hook..... <i>Director, Vocational Rehabilitation and Special Education</i> <i>State Department of Education</i> Cheyenne		X	

**The Amount of Professional Time of Personnel
Assigned to Programs or Provisions for the Gifted,
By States**

Full time	Part time	Slight or none
1. California (2)	1. Arizona	1. Alabama
2. Georgia	2. Canal Zone	2. Alaska
3. Hawaii	3. Connecticut	3. American Samoa
4. Illinois	4. Delaware	4. Arkansas
5. Minnesota	5. District of Columbia	5. Colorado
6. New York	6. Florida	6. Guam
7. North Carolina	7. Kansas	7. Idaho
8. Ohio	8. Louisiana	8. Indiana
9. Oregon	9. Maine	9. Iowa
10. Pennsylvania	10. Massachusetts	10. Kentucky
11. Puerto Rico	11. Michigan	11. Maryland
12. Texas	12. Mississippi	12. Missouri
13. Washington	13. Montana	13. Nebraska
	14. Nevada	14. New Jersey
	15. New Hampshire	15. Oklahoma
	16. New Mexico	16. Rhode Island
	17. North Dakota	17. South Carolina
	18. Tennessee	18. South Dakota
	19. Utah	19. Vermont
	20. Virginia	20. Virgin Islands
	21. West Virginia	21. Wisconsin
	22. Wyoming	

Appendix C

Cooperative Research Projects Related to the Area of the Gifted and Talented

The Office of Education provides support for research of significance to education through its Cooperative Research Program. The purpose of this program is to develop new knowledge about major problems in education or to devise new applications of existing knowledge in solving such problems. Research, demonstrations, and research development activities pertaining to the able student are an integral part of the total program.

The program is operated under the terms of Public Law 531, 83d Congress, which authorizes the Commissioner of Education to "enter into contracts or jointly financed cooperative arrangements with universities and colleges and State educational agencies for the conduct of research, surveys and demonstrations in the field of education."

Since the beginning of the program the following projects dealing with talented students have been supported through the regular contract research program:

<i>Project No.</i>	<i>Investigator and Location</i>	<i>Title and duration</i>
Elementary		
099	ELMER VAN EGNIOND and ALVIN ZANDER University of Michigan Ann Arbor, Mich.	Social Adaptation of the Highly Intelligent Pupil February—September 1957
297	FREDERICK B. DAVIS and GERALD S. LESSER Hunter College New York, N.Y.	The Identification and Classroom Behavior of Elementary School Children, Each of Whom Is Gifted in at Least One of Five Different Characteristics September 1957—August 1959
392	FREDERICK B. DAVIS and GERALD S. LESSER Hunter College New York, N.Y.	The Identification of Gifted Elementary School Children With Exceptional Scientific Talent July 1958—March 1960

- 423 NELLIE D. HAMPTON and
TOM A. LAMKE
Iowa State Department of
Public Instruction
Des Moines, Iowa
Effects of Special Training on the
Achievement and Adjustment of
Gifted Children
March 1958—June 1959
- 554 ROBERT G. PETZOLD
University of Wisconsin
Madison, Wis.
The Perception of Music Symbols in
Music Reading by Normal Chil-
dren and by Children Gifted Musi-
cally
January—June 1959
- 614 NELLIE D. HAMPTON
Iowa State Teachers College
Cedar Falls, Iowa
Effects of Special Training on the
Achievement and Adjustment of
Gifted Children
March 1959—August 1960
- 790 CHARLES D. SMOCK
Purdue University
Lafayette, Ind.
Effects of Motivational Factors on
Perceptual-Cognitive Proficiency
of Children Who Vary in Intellec-
tual Level
February 1960—August 1962
- 923 NELLIE D. HAMPTON
Iowa State Teachers College
Cedar Falls, Iowa
Effects of Special Training on the
Achievement and Adjustment of
Gifted Children
May 1960—January 1962
- 933 MERLE M. OHLSEN
University of Illinois
Urbana, Ill.
Improved School Adjustment of
Underachieving Gifted Fifth-
Graders
September 1960—September 1962
- 994 E. PAUL TORRANCE
University of Minnesota
Minneapolis, Minn.
Understanding the Fourth-Grade
Slump in Creative Thinking
September 1960—November 1961
- 1316 MICHAEL A. WALLACH
Massachusetts Institute of
Technology
Cambridge, Mass.
Cognitive Originality, Physiognomic
Sensitivity, and Defensiveness in
Children
August 1961—July 1964
- 1352 ROBERT L. SPALDING
University of Illinois
Urbana, Ill.
Achievement, Creativity, and Self-
Concept Correlates of Teacher-
Pupil Transactions in Elementary
School Classrooms
October 1961—October 1962
- 1616 PATRICK SUPPES
Leland Stanford, Jr., Uni-
versity
Stanford, Calif.
Development of Mathematical Con-
cepts in Children
July 1, 1962—June 30, 1967
- 1635 GERALD S. LESSER
Michigan State University
East Lansing, Mich.
Mental Abilities of Children in Dif-
ferent Social and Cultural Groups
May 1, 1962—August 31, 1963
- D-005 PATRICK SUPPES
Leland Stanford, Jr., Uni-
versity
Stanford, Calif.
Experimental Teaching of Mathe-
matical Logic to Talented Fifth
and Sixth Graders
August 1961—September 1963
- D-010 JACK W. BIRCH
University of Pittsburgh
Pittsburgh, Pa.
A Field Demonstration of the Effec-
tiveness and Feasibility of Early
Admission to School for Mentally
Advanced Children
November 1961—June 1964

Secondary

- 037 CHRISTIAN W. JUNG and
WENDELL W. WRIGHT
Indiana University
Bloomington, Ind.
- 052 SISTER MARY VITERBO
McCARTHY
Regis College
Weston, Mass.
- 098 JACOB W. GETZELS and
PHILIP W. JACKSON
University of Chicago
Chicago, Ill.
- 208 PAUL H. BOWMAN
University of Chicago
Chicago, Ill.
- 226 JOHN C. FLANAGAN
University of Pittsburgh
Pittsburgh, Pa.
- 320 PAUL R. KLOHR, *et al*
Ohio State University
Columbus, Ohio
- 397 NED A. FLANDERS
University of Minnesota
Minneapolis, Minn.
- 451 ALVIN ZANDER
University of Michigan
Ann Arbor, Mich.
- 608 ELIZABETH M. DREWS
Michigan State University
East Lansing, Mich.
- 623 MERLE M. OHLSEN and
FRED C. PROFF
University of Illinois
Urbana, Ill.
- 635 JOHN C. FLANAGAN
University of Pittsburgh
Pittsburgh, Pa.
- 715 WILLIAM W. COOLEY
Harvard University
Cambridge, Mass.
- Why Capable High School Students
Do Not Continue Their Schooling
September 1956—September 1958
- The Effectiveness of the Modified
Counseling Procedures in Promot-
ing Learning Among Bright Un-
derachieving Adolescents
October 1956—August 1957
- The Gifted Adolescent in the Class-
room
January 1957—June 1959
- Educational Motivation Patterns of
Superior Students Who Do and
Who Do Not Achieve in High
School
July 1957—June 1959
- A Survey and Followup Study of
Educational Plans and Decisions
in Relation to Aptitude Patterns
July 1957—June 1962
- Identification and Development of
Talent in Heterogeneously
Grouped Students in a General
Education Program at the Second-
ary School Level
January 1958—June 1959
- The Effects of Direct and Indirect
Teacher Influence on Learning
July 1958—September 1960
- The Influence of Teachers and Peers
on Aspirations of Youth
September 1958—August 1960
- The Effectiveness of Homogeneous
and Heterogeneous Ability Group-
ing in Ninth Grade English
Classes with Slow, Average, and
Superior Students
March 1959—March 1961
- The Extent to Which Group Coun-
seling Improves the Academic and
Personal Adjustment of Under-
achieving Gifted Adolescents
March 1959—June 1960
- The Identification, Development, and
Utilization of Human Talents
April 1959—June 1963
- Evaluation and Follow-Up Study of
Thayer Academy's Summer Ad-
vance Study Program in Science
and Mathematics
July 1959—June 1960

- 737 J. P. GUILFORD
University of Southern
California
Los Angeles, Calif.
Creative Thinking in Children at the
Junior High School Level
August 1959—August 1961
- 742 CARSON MCGUIRE
University of Texas
Austin, Tex.
Factors Associated With the Educa-
tional Utilization of Human Tal-
ents, Part II
August 1959—August 1960
- 845 WILBUR B. BROOKOVER
Michigan State University
East Lansing, Mich.
Relationship of Self-Images to
Achievement in Junior High
School Students
January 1960—June 1961
- 846 WILLIAM W. FARQUHAR
Michigan State University
East Lansing, Mich.
A Comprehensive Study of the Mo-
tivational Factors Underlying
Achievement of Eleventh-Grade
High School Students
December 1959—December 1961
- 932 JOHN W. M. ROTHNEY
University of Wisconsin
Madison, Wis.
The Discovery and Guidance of Su-
perior Students
August 1960—July 1962
- 965 JAMES J. GALLAGHER
University of Illinois
Urbana, Ill.
Productive Thinking of Gifted Chil-
dren
August 1960—August 1963
- 1060 PHILIP R. MERRIFIELD
University of Southern
California
Los Angeles, Calif.
Aptitude and Personality Measures
Related to Creativity in Seventh-
Grade Children
July 1960—August 1961
- 1073 MARTHA T. and
SARNOFF A. MEDNICK
University of Michigan
Ann Arbor, Mich.
The Associative Basis of the Crea-
tive Process
August 1960—August 1963
- 1097 PAUL H. BOWMAN and
JAMES V. PIERCE
University of Chicago
Chicago, Ill.
Sex Differences in Achievement Mo-
tivation of Able High School Stu-
dents
December 1960—November 1961
- 1138 CARSON MCGUIRE
University of Texas
Austin, Tex.
Prediction and Modification of Tal-
ent in Senior High Schools
July 1961—August 1964
- 1203 DORIS R. ENTWISLE
Johns Hopkins University
Baltimore, Md.
Factors of Specific Set (Attensity)
in Learning of Gifted Secondary
Students
May—October 1961
- 1263 BETTY J. BOSDELL
University of North Dakota
Grand Forks, N. Dak.
Evaluation of Counseling Treat-
ments With Underachieving High
School Students
July 1961—June 1962
- 1342 J. P. GUILFORD and
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- 1810 PHILIP B. DANIELS
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- D-009 MIRIAM L. GOLDBERG and
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Florida State Department of Education

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